Tampere University

Hilla Rajaveräjä

CARE IN HUMAN-HOUSEPLANT RELATIONSHIPS

Faculty of Social Sciences
Master's Thesis
March 2020

ABSTRACT

Hilla Rajaveräjä: Care in human-houseplant relationships
Master's Thesis
Tampere University
Master's Degree Programme in Gender Studies
March 2020

This Master's thesis research explores how care produces relations of human-houseplant relationships. The theoretical framework of the thesis builds on the methodology of feminist new materialisms and multispecies studies. Following the actor network theory and Donna Haraway's concept of companion species, humans and nonhumans are defined as agents and companion species that form in co-creation and are dependent on each other, because they consist of situated webs of relations. Therefore, regarding the subject of the thesis, both houseplants and humans are agents that are part of each other's web of companion species. The theoretical framework for care is built on María Puig de la Bellacasa's three-dimensional care: labour/work, affect/affections and ethics/politics. Care is comprehended to be embedded in the relations of humans and houseplants as multilateral, asymmetric actions of care, which are necessary for the houseplants to subsist.

The research data consists of semi-structured thematic interviews of six Finnish houseplant carers. Most of the interviews were conducted at the interviewees' homes during the first months of the year 2019. Abductive content analysis was employed to analyse the data and examine how the three dimensions of care, doing care, affect and ethics, produced and emerged from the relations of human-houseplant relationships.

The analysis indicates that hands-on caring for houseplants enables humans to learn to know and interpret the needs of their houseplants. Each plant and human carer together with the human carer's rhythm of care and the indoor environment of their home produce the relationship. Human relations and community are also part of the human-houseplant relationships as memories and attachment, and by either supporting or complicating hands-on caring for the plants.

The interviewees often wanted to have houseplants that were good looking and easy to care, because they wanted to succeed in caring for the plants and did not want to lose them. Caring for houseplants involves ethical negotiations of good care and obligation to care to which human carer can respond with affective care. Positive and negative affective responses are also part of the care and either encourage or discourage human carer to continue care for their plants. Furthermore, challenges in caring for houseplants could create cuts and reorder the relations of humans and houseplants by both ending existing relations and creating new ones. Hence caring for houseplants involves collaboration, negotiation, competition and challenge. These tensions and collaborations reveal the becoming with of humans and houseplants together with each other and the other nonhumans of their webs of relations.

Keywords: human-plant relationships, nonhuman, care, actor network theory, companion species, feminist new materialisms

Table of Contents

1 Introduction

Care is a much-researched topic in social sciences and feminist studies, yet the research often concerns only humans' care for humans (Puig de la Bellacasa 2017, 2–4; Anttonen & Valokivi & Zechner 2009). In this master's thesis research, following María Puig de la Bellacasa (2017), I comprehend care as part of the existence of humans and nonhumans and their relations. I approach care in the human-houseplant relationships through feminist new materialisms and actor network theory, because both of the approaches enable the analysis of agency of houseplants and other nonhumans, and their relatedness to each other and humans.

Feminist new materialisms focus on rethinking matter and suggest that the matter of which living and non-living beings are comprised should be understood as dynamic, agentic and contributing to the processes of world formation (Wingrove 2016). Matter and materiality are part of how, for example, humans understand and see the world and act in it. Matter also changes actions. Hence feminist new materialisms understand matter and language as inseparable, because both language and matter are part of the process of the world formation (Alaimo & Hekman 2008; Tiainen & Kontturi & Hongisto 2015; Wingrove 2016). One can not understand matter without language, because human thinking is connected to words and meanings, but on the other hand matter can change and alter understanding. Hence matter and language are intertwined and co-create each other. Ultimately, the main focus of feminist new materialisms is relationality, co-creation, intertwinedness, agency and becoming of humans and other than humans. Therefore, feminist new materialisms question dualisms, such as human/animal, culture/nature and mind/body, because there is not a precise line where the one ends and the other one begins, and aim to redefine the relations of humans and nonhumans. (Alaimo & Hekman 2008; Tiainen & Kontturi & Hongisto 2015; Wingrove 2016.)

Increasing number of scholars with a variety of disciplinary and interdisciplinary backgrounds study relations of humans and nonhumans with multispecies concepts and methodologies (Betz & Margulies 2019; Bull & Holmberg & Åsberg 2018; Haraway 2008; 2003; Hyvärinen 2019; Swanson 2019; Tsing 2015). Both feminist new materialisms and actor network theory are part of the multispecies concepts and methodologies, because they comprehend humans and nonhumans, such as animals, microbes, mushrooms, plants and objects, to be intertwined and form in interaction with each other (Haraway 2008; 2004; Power 2005; Hitchings 2003). As Lynda Birke (2012, 150) phrases humans and nonhumans "are not "in" relationships, rather they are relationships". Human-animal relations have been a major feature in multispecies studies (Bull & Holmberg & Åsberg 2018; Head

& Atchison 2009; Kirksey & Helmreich 2010), but researchers have increasingly studied other nonhumans as well, such as plants (Benson & Fischer 2007; Cielemęcka & Szczygielska 2019; Fleming 2017; Head & Atchison 2009; Hitchings 2003; Jones & Cloke 2002; Power 2005; Szczygielska & Cielemęcka 2019). Olga Cielemęcka and Marianna Szczygielska (2019) describe the growing interest for plants in arts, humanities and social sciences as a "vegetal turn". The publishing of a plant focused thematic number *Plantarium: Human-Vegetal Ecologies* (Szczygielska & Cielemęcka 2019) in Catalyst journal in December emphasises how current a research focusing on plants is. However, houseplants have received little attention.

This is interesting because houseplants are grown indoors for many years and interiors are mainly human controlled environments in which plants will die without care. Stacy Alaimo (2016, 19–22) argues that house has been seen as a very human space that has been purified of all but a few nonhuman species. Yet house can also be perceived as living with nonhumans (Alaimo 2016, 19–22). Therefore, interiors as a space, and how one perceives interiors, impact on humans and houseplants' relations. Houseplants are traditionally grown for decorative purposes because of their delightful flowers and leaves. Nevertheless, humans have houseplants also for other reasons, such as they enjoy cultivating and caring for them, the plants provide physical and mental health benefits, can represent their owner's identity and also let them connect with nature (Cameron 2014; Freeman & Dickinson & Porter & van Heezik 2012; Lohr 2010).

Houseplants have been present in Western culture at least since the first houseplant boom which began during the end of the industrial revolution in the 19th century (Arkio 1985; Baron 2018; Ramanathan 2017; Smith 2016; Valkama 2018). Since then the popularity of houseplants has fluctuated following different kinds of style orientations and houseplants have become common in public spaces as well. According to some newspapers (Vincent 2017; Nelskylä 2017; Green 2018; Gander 2017; Ramanathan 2017) there is an early 21st century houseplant boom going on, which can be noticed for example as increased sales of houseplants and many pictures of houseplants in visual photo-sharing platforms such as Instagram, Pinterest and Facebook. Hence houseplants are in a way, a long-lasting, but also a recent topic.

The aim of this thesis is to explore and comprehend the intertwined relations of humans and houseplants through feminist new materialisms, actor network theory and Puig de la Bellacasa's (2017) concept of three-dimensional care: labour/work, affect/affections and ethics/politics. Houseplants will die in indoor environments without humans' care and houseplants also care for

humans by providing physical and mental health benefits, hence focusing on care enables to observe these relations and how indoor environments are intertwined in them. In this research I also aim to develop the methodology of feminist new materialisms, think beyond human centrality and redefine the relations of human and nonhumans. Thinking beyond human centrality and redefining the relations is important because, as Birke (2012, 150) says recognising the nonhuman others as part of who humans are and how humans live in the world, as part of humans' social lives and social structures, can help humans to not see these others through a lens of inferiority. How humans present and understand nonhumans can impact on how humans aim to construct the social structures and society as a whole. I did my bachelor's thesis regarding human's grief of losing a significant other that in my thesis was a cat. Therefore with this master's thesis I wanted to reach further away from the animal kingdom and yet I wanted to focus on something that was close to me, as suggested in feminist methodologies, hence I ended up to examine the relationship of human and houseplant.

The thesis has been structured in the following way. The next chapter summarises advice of plant care guides to care for houseplants in indoor environments and it serves as a background information for this research. The third chapter contains the theoretical background of this research which includes explanations of how plants and houseplants have been understood in Western culture and how they and other nonhumans can be perceived as having agency. Then Donna Haraway's (2008) concept of companion species is presented. The concept enables to comprehend how humans and houseplants form in relation to each other and co-create each other as they live together. Then it is explained how, following Puig de la Bellacasa (2017), care is understood in this research as three-dimensional: labour/work, affect/affections and ethics/politics. Ultimately, at the end of the third chapter are the research questions. The fourth chapter outlines the data collection and how the interviews of the six houseplant owners were planned and conducted. Furthermore, the chapter includes presentation of abductive content analysis and how it was employed in the analysis of the interviews. The fifth chapter consists of the findings of this research and it enfolds the analysis of doing care and the relations of human-houseplant relationships which are present in doing care, such as indoor environment, human relationships, ethics and affects. Then finally the sixth chapter presents the conclusions and limitations of this thesis and possible areas of future research.

2 Caring for houseplants in plant care guides

This chapter includes a summary focused on how plant care guides advice to care for houseplants, fulfil their needs and support their wellbeing, in indoor environments. Since there is very little feminist research on human-houseplant relationships, plant care guides offer understanding of everyday hands-on caring for houseplants. Plant care guides are targeted to houseplant owners and hobbyists, hence I give my reading of the issues and practices in the plant care guides which houseplant owners could be familiar with. However, plant care guides, nor houseplant owners, do not always agree on certain issues, such as whether misting houseplants is useful. Hence the guides offer general understanding and advice, and my reading of them takes part in the design and analysis of this research. Actor network theory guides my reading to focus on human and nonhuman actors, such as light, soil and temperature, that are part of caring for houseplants.

Many plant care guides (Hietala & Puupponen 1981; Lipponen & Hilpo 2001; Matthews 2012; Månsson 1999; Stenman & Wennström 2008; Swartström 2006) list 100–200 houseplant species and even more cultivars. In Finland various houseplant genera or species have been popular for years or trended at certain times, such as different kinds of palms and succulents, or more specifically for example Monstera deliciosa (Picture 1), Phalaenopsis (Picture 2) and Epipremnum aureum (Picture 3).

Picture 1, Picture 2 and Picture 3: Houseplants that have been popular.

The plants that are grown indoors as houseplants most often originate from tropical or subtropical climates, and some come from temperate and arid climates as well. They also originally grow in different places, for example some are undergrowth and some are epiphytes. (Hietala & Puupponen

1981, 409–411; Månsson 1998, 54; Swartström 2006, 6.) Hence different houseplant species need different amounts of light, water (moisture and humidity), warmth and nutrients depending on which kind of environment the species has evolved and grown in. Houseplant species and cultivars are also bred in various methods in laboratories and greenhouses which can impact on their needs (Matthews 2012, 11; Månsson 1998, 54; Swartström 2006, 10–11). Some plant species and cultivars adapt to different kinds of surroundings better than the others, and there can also be small differences between individual plants. Therefore plants' evolutionary history and ability to adapt impact on which kind of environment they will be able to thrive in.

Indoors as a space impact on whether houseplants can be healthy, hence it matters where one places their houseplants. In Finland southern windows of a house receive direct sunlight the most whereas eastern and western windows receive it less, but there is a lot of indirect sunlight. Northern windows receive mostly indirect sunlight, hence they are also a bit cooler. (Hietala & Puupponen 1981, 412–413; Lipponen & Hilpo 2001, 43; Månsson 1998, 55–56.) Plants need light to live and produce energy through photosynthesis, but direct sunlight can be too heavy for some plants and burn their leaves. Therefore human carer needs to consider how much light each plant needs. The size and number of the windows impact on how much light there is available, as well as, for example curtains, trees and other buildings which may reduce and block sunlight. The seasons also impact on how much sunlight there is available. (Hietala & Puupponen 1981, 408–414; Lipponen & Hilpo 2001, 43–44; Månsson 1998, 54–56.) Furthermore, the plant care guides (Lipponen & Hilpo 2001, 45; Matthews 2012, 128; Månsson 1998, 56) advise that human carer may use plant lights to help their plants receive enough light and they may also need to clean dust from the surface of plants' leaves, in order to ensure the plants will be able to absorb light.

Houseplants originate from different temperatures, but many of them thrive in about 20 degrees which is the usual temperature in Finnish indoor living environments (Hietala & Puupponen 1981, 415–416; Lipponen & Hilpo 2001, 47; Månsson 1998, 60). The plant care guides (Hietala & Puupponen 1981, 415–416; Lipponen & Hilpo 2001, 47; Månsson 1998, 60) warn that draught and too cold temperature can be harmful for plants, because they can harm plants' leaves and roots. Similarly, humidity is important for houseplants, because if the air is too dry plants may transpire too much water which in turn may result their leaves and flowers to wilt, shrivel and dry. The guides (Hietala & Puupponen 1981, 408–417; Lipponen & Hilpo 2001, 45; Månsson 1998, 10) explain that many houseplants would enjoy high humidity, but it can be difficult to offer in central heated indoor living environments. During the winter the heath emitting from the radiators sucks the humidity out of the air and can dry

houseplants (Hietala & Puupponen 1981, 408–417; Lipponen & Hilpo 2001, 45; Månsson 1998, 10). Yet the guides (Hietala & Puupponen 1981, 408–417; Lipponen & Hilpo 2001, 45; Månsson 1998, 10) remind that plants should not be watered too much in winter, because they also receive less sunlight which decreases photosynthesis and the amount of water the plants consume. The species, age, size and condition of a plant, and the size of its roots and pot, the material of the pot and the quality of the soil the plant has been planted in, as well as the temperature and the light it receives, impact on how much and how often the plant needs water (Hietala & Puupponen 1981, 418; Lipponen & Hilpo 2001, 51–52). Water is essential for plants life and transports nutrients in the plant.

Plants need various nutrients, for example nitrogen, phosphorus and potassium, to live and grow. The plant care guides (Hietala & Puupponen 1981, 422–423; Lipponen & Hilpo 2001, 52–53; Matthews 2012, 127) explain that as houseplants grow in their pots in a small amount of soil, these nutrients deplete and wash away by watering, and hence houseplants need to be fertilised. The guides also describe that it is time to repot a plant and give it fresh soil when the growth of the plant slows down, its roots fill the whole pot, the soil becomes too compact and the plant may start to look unhealthy. Repotting can be hard for the plant because its roots may get slightly damaged during the process. Therefore the guides advise repotting should not be done too often and it is advisable to do it when there is enough light, water, warmth and nutrients for the plant, because the plant has better opportunity to recover from repotting then. (Hietala & Puupponen 1981, 424–425; Lipponen & Hilpo 2001, 57; Månsson 1998, 59.)

The plant care guides (Hietala & Puupponen 1981, 409–411; Lipponen & Hilpo 2001, 47; Månsson 1998, 59–60) suggest that it is often beneficial to provide houseplants rest from active growth during the winter when there is less daylight available, because without enough light plants will languish. In addition, some plants, such as cacti, have a biological rhythm that requires rest at some point in the year for them to be able to bloom. During the rest it is advisable to ensure that plants receive the light that is available, water plants less and refrain from fertilising them, because plants consume less as they rest. Furthermore, lower temperature is beneficial for many plants during the rest, and some plants may even require it. (Hietala & Puupponen 1981, 409–411; Lipponen & Hilpo 2001, 47–50; Månsson 1998, 59–60.) According to the plant care guides (Hietala & Puupponen 1981, 450–459; Lipponen & Hilpo 2001, 65–69; Månsson 1998, 60–63) unhealthy houseplants often signal poor growth environment, such as too much or too little light, water or fertiliser, dry air, or poor and too compact soil. Different kinds of plant diseases, such as grey mould, leaf spot and root rot, and pests, such as aphids, mealybugs, spider mites and thrips, also exist and they can invade houseplants and

threaten their wellbeing. The guides (Hietala & Puupponen 1981, 450–459; Lipponen & Hilpo 2001, 65–69; Månsson 1998, 60–63) argue that poor growth conditions may predispose houseplants to diseases and pests. Anyhow pests and diseases can be prevented and disposed with different practices.

The indoor environment also sets limits to how much a houseplant can grow. The plant care guides (Hietala & Puupponen 1981, 429; 432–433; Lipponen & Hilpo 2001, 58–63; Månsson 1998, 60; 63–66) advise that when the pot of a plant gets too small and human carer can not provide it a larger pot, it may be time to divide the plant. At times one may also need to cut or prune the plant. The divided and cut parts of the plant can be used for plant propagation. (Hietala & Puupponen 1981, 429; 432–433; Lipponen & Hilpo 2001, 58–63; Månsson 1998, 60; 63–66.)

Ultimately, many little things together impact on the wellbeing of a houseplant starting from the individual needs of the plant and the unique indoor environment the plant is in. Hence it may be useful to know what kind of environment each plant species enjoys, observe the indoor environment and the care provided to the houseplants, and consider how each plant adapts to them. Different kinds of plant care guides and web pages offer plant care tips and information on the needs of specific houseplant species and cultivars, which can assist human carer's process of learning to know how to care for their houseplant. Caring can also be learnt from other hobbyists or by experimenting alone with the plants.

3 Understanding houseplants

The aim of this research is to understand the intertwinedness of humans and houseplants through care and redefine their relations following the methodology of feminist new materialisms. Hence in this chapter I present theoretical and methodological debates that provide tools to understand human-houseplant relationships. Feminist scholars have argued that hierarchical and dualistic structures regarding, for example, man/woman, culture/nature, mind/body and human/animal, are embedded in Western culture. It can also be argued that in Western culture plants have been seen and understood through these hierarchical and dualistic structures (Ryan 2012, 101–104; Lewis-Jones 2016, 1). In this chapter I question the hierarchical and dualistic thought and consider perceiving plants, and other nonhumans, through both their similarities and differences to humans. Then I turn my focus on how the houseplants are seen as objects and living beings at the same time and how actor network theory enables to understand plants as agents and having agency. I continue with houseplants' agency as I introduce the concept of companion species and how humans and houseplants, as companion species, together with other nonhumans co-create each other as they live together. Then I present how care connects with the concept of companion species and how care is understood in this study as three-dimensional: labour/work, affect/affections and ethics/politics. Ultimately, at the end of this chapter I define the research questions of this thesis.

3.1 The otherness of plants through sameness and difference

The Western thought includes various kinds of understandings of plants, but plants have often been differentiated "as passive, sessile, and silent automatons lacking a brain, as accessories or backdrops to human affairs" (Ryan 2012, 101–104). The differentiation emphasises the distinction between humans and plants, and how characteristics that do not define humans describe plants. This view can be understood through the Western nature/culture dualism and the hierarchy of "us" and "the other". The nature/culture dualism is a Western philosophical understanding that consists of the divide between nature and culture. In it humans and human cultures, principally Western humans and culture, are understood as separate and superior from nature, and the rest of nonhuman beings and matters (e.g. Plumwood 2012, 3; 79; Plumwood 1993). Hence, according to the Western nature/culture dualism Western humans are "us", those they know and associate themselves within; and "the others" are those who are alien to them, unknown and different from them. Hierarchically, us is considered better than the others.

The relation of plants to other nonhumans and humans in within Western nature/culture dualism can be perceived through Simone de Beauvoir's thoughts of the Western dualism of gender. de Beauvoir (1953, 15) points out how man and woman are not actually quite the opposites, because man is seen as the positive and neutral, whereas woman is the negative, the one defined by what man is not. Therefore, because man is the subject and the absolute and woman is defined as relative to him, she is the other. (de Beauvoir 1953, 16.) Hence in the Western nature/culture dualism plants and other nonhumans are defined in relation to humans. They are seen less than the humans and valued in terms of human. The other nonhuman animals, especially some mammals, are in some cases valued closer to humans, often depending on the role their species has been given in the Western society rather than their humanlike intelligence. John Charles Ryan (2012, 101) points out that "the qualities considered absent in plants are those employed by biologists to argue for intelligence in animals". Hence valuing nonhumans in terms of human puts them in a hierarchy and reduces those who are further away from humans to more like objects.

Valuing nonhumans in terms of human does not let the nonhumans "talk back" on their own terms, nor does it question the terms of human or encourage changing them (Rose 1999 in Power 2005, 41). In relation to this when researching other species there is often the problematic question of anthropomorphism, the attribution of human features or qualities to nonhumans. Val Plumwood (1993, 137–140) makes an important claim about how humans need to respect nonhumans. Respect involves acknowledging the distinctness and difference of nonhumans, and avoiding reducing or assimilating them to the human sphere, but also seeing the sameness of humans and nonhumans (Plumwood 1993, 137–140). Hence there is the question of what is human and whether human qualities are in fact for humans only or whether humans are reaching the experience of the other species, regarding to the knowledge that is available of that species at that particular time (Telkänranta 2016 & 2015; Schuurman 2015). Furthermore, Plumwood (2012, 79) states how the major challenge for Western culture is to re-envision humans "as ecologically embodied beings akin to rather than superior to other animals". Plumwood's argument emphasises how it is not enough to re-envision the hierarchical understanding of nonhumans but as important is to re-envision the hierarchical understanding of humans.

Similarly, Michael Pollan (2013) describes how plant scientists have studied plants to understand them better, and distinguishes two factions in the field of plant neurobiology today. One seems to prefer the animal/plant/object hierarchy, whereas the other one aims to see plants in a new way to acknowledge their similarities and differences to animals (Pollan 2013). Plant scientists have

discovered that plants have all the senses that humans have (sight, smell, touch, taste and hearing), but because plants are sessile beings who do not have a walnut-shaped brain or do not sense emotions, their senses have developed in a manner that is useful for them (Mancuso & Viola 2015; Pollan 2013; Appel & Cocroft 2014). For example, in plants hearing is not connected to ears, as a single organ, but is diffused within the whole plant. The earth conducts sound well, hence the roots of a plant, which are their most sensitive half, sense sound vibrations in the earth similarly as humans sense a loud bass music in their body (Mancuso & Viola 2015, 72–74). In addition to the five similar senses with humans, plants have fifteen other senses with different purposes, such as measuring soil humidity, identifying even distant sources of water, sensing gravity and electromagnetic fields, and distinguishing and measuring numerous chemical gradients in air and in ground (Mancuso & Viola 2015, 77–78). Some of plants' senses are situated in their roots, some are in their leaves and some are diffused in their entire organism (Mancuso & Viola 2015, 78). Furthermore, plants are different from humans in the sense that they have a modular structure, hence plants are more like colonies than individuals, because an individual plant can be divided and continue to live as a separate being (Mancuso & Viola 2015, 78; 125; 137). Scientists have also argued for other similarities and differences, such as plants recognise their kin, their roots may utilise swarm intelligence and they sleep (Mancuso & Viola 2015, 91–94; 144–146; 148–154). In conclusion, at first sight plants seem to be very different from humans, and they are, but they also have significant similarities.

Humans and plants have a long, intertwined history which impacts the encounters of humans and houseplants in this particular space and time which I am doing my research. Haraway (2008, 4) describes how "figures are at the same time creatures of imagined possibility and creatures of fierce and ordinary reality; the dimensions tangle and require response." In relation to plants this could mean that there are 1) the ways how humans think about plants and 2) the way how plants actually are. Both of these dimensions impact the human-plant relationships. Rejecting the dualistic and hierarchical thinking makes one balance between the sameness and difference, or familiarity and foreignness, when trying to understand the other (Ruonakoski 2011; Plumwood 1993, 137–140). Furthermore, understanding the sameness and the difference of humans and plants, or other nonhuman agents for that matter, is an ongoing and changing process (Telkänranta 2016 & 2015; Schuurman 2015).

3.2 Houseplants as objects, subjects and agents

As the previous subchapter shows, the ideas about humans, animals and plants vary across time and space. These different discourses, understandings of the reality, exist simultaneously and often

overlap each other, so that they are not clearly separated. Regarding how houseplants have been understood two discourses seem to be frequent in Western culture: plants as more like objects and plants as living beings.

Emma Power (2005, 40–41) explains how in Western culture gardens are often described as spaces in which nonhuman "natures" are moulded according to the cultural ideas and actions of human gardener; hence gardening is seen as a process in which nature is controlled and turned into culture. Gardens are seen to provide a merely aesthetic contribution to human worlds and the nonhumans are represented as raw material of culture, a passive other that humans can shape as they wish. This kind of narrative constructs a nature/culture divide into gardens following the Western nature/culture dualism (Power 2005, 40–41). Quite similarly, indoor decoration and design can represent houseplants mainly as design objects that create a certain kind of cultural atmosphere and style. Houseplants are often valued for their blooms and leaves (colour, pattern, form and texture) and utilised to make the house more beautiful and the indoor environment more pleasant. In other words, they are seen as a passive other that humans can use as a raw material to decorate their homes.

However, houseplants need to be cared for, otherwise they will wither and lose their value as decoration. Hence the discourse of them as an object is hardly ever the only discourse that there is present regarding to them. The other one is houseplants as living beings. The research about pet grief and how pets are in a liminal position in Western culture defines that pets are simultaneously seen to belong to the socially constructed categories of person/being and nonperson/object, and treated according to these categories (Redmalm 2015, 21; Sanders 1995, 209). Houseplants are seldom named as persons, but they are considered to be living beings, for example in plant care guides of the previous chapter, and that prevents categorising them only as objects. Therefore, houseplants are in a liminal position, because they are understood as objects and living beings at the same time.

Houseplants themselves also challenge the categorisation to passive objects because they are living beings and do not always act like designer wants them to act. In her online article Carrie Smith (2016) says:

> "It is also worth noting that plants can be used to design, but are not themselves designed objects, in the sense that we do not have complete control over the way plants look, or over their natural processes. (A flower can fall off; a leaf can be consumed by mites.)" (Smith 2016.)

Similarly Power (2005) and Russell Hitchings (2003) pay attention to the agency of plants in their actor network theory studies of suburban and private gardens. Their studies present that the plants and gardeners shape the gardens together with other nonhumans. Consequently, this questions human centrality and human control of gardens, and gives agency to plants and other nonhumans.

Power (2005, 43) emphasises the collaboration, negotiation, competition and challenge in the relationship of gardeners and plants, and how these actions make gardening a dynamic process. This also expresses the main point of actor network theory as "a general attitude and an attempt to be sensitive to the multitudes of circulating forces that surround us, affecting both each other and ourselves" (Latour 1999 in Hitchings 2003, 100). Therefore, Hitchings (2003, 100) describes actor network theory to be about how "people, objects, plants, animals and ideas all jostle against each other" and how through these interactions and relations the world, and our understandings of the world, find form. Hence actor network theory dismantles the hierarchies of humans and nonhumans and acknowledges how even ideas and objects impact on the others.

Ultimately, in actor network theory "agency is understood as an outcome of network building" (Power 2005, 42). In other words, agency is an outcome of being part of networks that shape the human and nonhumans. This kind of approach "decouples agency from the object/subject binary" (Whatmore 1999 in Power 2005, 42) and enables observing the relations of heterogeneous humans and nonhumans without rendering anyone or anything passive. Therefore actor network theory liberates plants, and other nonhumans, from the status of a passive object.

3.3 Humans and houseplants as companion species

Both actor network theory and Haraway's concept of companion species see nonhumans as agents. However, I understand actor network theory to focus more on the agency whereas the concept of companion species emphasises the co-creation of the agents. Haraway (2008, 165) describes companion species as constantly constituting, "a permanently undecidable category, a category-in-question[,] that insists on the relation as the smallest unit of being and of analysis". Hence companion species take form as they meet and by meeting form a relation. They do not exist before their meeting and relations, and their meetings constantly co-constitute them. (Haraway 2008, 4.) As Haraway (2008, 4) says "to be one is always to *become with* many". One can not exist without the others, and one and the others constantly impact on each other. Therefore one and the others are intertwined in a way that they would not be what they are without each other.

For Haraway (2008, 165) species does not predetermine its status as an artefact, machine, landscape, organism, or human being. Species are not harmonious wholes (Haraway 2008, 287). They are in motion and changing. Haraway (2008, 165) also points out how "every species is a multispecies crowd". There are species within the species, as they exist together. Hence, as Haraway (2008, 165) says "human exceptionalism is what companion species cannot abide – – we have never been the philosopher's human, we are bodies in braided, ontic, and antic relatings." Therefore companion species approach questions the Western nature/culture dualism at its very core.

Both actor network theory and companion species provide an idea of networked co-constituting relations which is useful in examining indoor human-plant relationships. The idea guides to comprehend that not just humans and houseplants, but many other animate and inanimate nonhumans need to be acknowledged when examining human-houseplant relationships, such as pets, microbes, soil, water, sunlight and pots. For example, considering pots reveals their intertwinedness with houseplants, because most often plants are brought inside homes in pots. Although other possibilities for storing the soil for houseplants and providing the space for their roots exist as well, such as plant terrariums. Pots come in different sizes, materials and shapes, and with different features, such as drainage, self-watering and plant hangers. Pots have decorative value like houseplants and people have used different kinds of pots during the entwined history of humans and houseplants. In general plants could not have been brought into Western homes without some kind of containers.

Alaimo (2016, 19–22) explains how house as a space has been seen as "purified by elimination of all but a few nonhuman species deemed desirable". Therefore usually in Western context house is seen as a completely human/cultural space which can establish the boundaries between nature and culture. Yet Alaimo (2016, 19) questions this narrative and describes how human habitation can be also seen as "living with, rather than walling out, other creatures". The home could be re-envisioned as a liminal sphere if we acknowledged the nonhumans on this human zone, such as pests and microbes (Alaimo 2016, 22). Following this idea of liminality, I wonder whether houseplants, deemed as desirable nonhuman species, can support the liminality because they require soil to live and small insects and microbes inhabit the soil as well. Houseplants can also claim more and more space of the house as they grow, or when their human carer gets excited and brings more and more plants to their home, as is the case in the newspaper articles (Green 2018; Nelskylä 2017; Biggs 2018) in which people fill their homes with plants.

It is not unusual for Western people to spend rather many hours of their days indoors and many people live in urban places where there might not be that much green spaces outside. Hence some of the newspaper articles (Biggs 2018; Baron 2018) suggested that one of the reasons for the current houseplant boom is people's yearning to have more greenery in their lives. Houseplants provide cosy and relaxing home, and enable their owners to care for something. Studies on indoor and outdoor plants indicate that people enjoy cultivating and caring for plants, appreciate their decorative value, and in addition, the plants can represent people's identity and help them to connect with nature (Cameron 2014; Freeman & Dickinson & Porter & van Heezik 2012). The studies also present that plants provide physical and mental health benefits for humans, such as higher humidity, reduced aerial pollutants, reduced stress, increased pain tolerance and improved productivity (Cameron 2014; Freeman & Dickinson & Porter & van Heezik 2012; Lohr 2010). This is because humans have learned and innate responses to plants and some of these responses have genetic components (Lohr 2010), which in turn reflects the long, intertwined companion species history of humans and plants. Yet bringing plants indoors sets many challenges to plants, such as unsuitable lighting, temperature, humidity, watering, aerial environment and nutrition (Cameron 2014). Humans respond to these challenges by caring for the plants, for example, by watering them and trying to place the plants so that they receive enough light and do not suffer from draught.

3.4 Care in the relations of humans and houseplants

Houseplants need to be cared and one can learn to care for them by different means. In this subchapter I focus on care as a concept and aim to explain how care is understood in this research. A lot of research in social sciences concerns how humans care for other humans. Nonetheless, Puig de la Bellacasa (2017) has decentred the human agency of care and included also nonhumans as cared for and carers, hence I approach care through her work.

Puig de la Bellacasa (2017, 1) describes care as omnipresent, because it is often present in one way or another, and also the absence of care, neglect, has effects. She points out how we can not choose the interdependency of humans and nonhumans because the interdependency is a condition. Similarly, care is concomitant to the continuation of life, because in order for most of the humans and nonhumans "to merely subsist somebody/something has (had) to be taking care somewhere or sometime". (Puig de la Bellacasa 2017, 70.) Puig de la Bellacasa (2017, 219) also states that care coforms both carer and cared for. Therefore, she follows Haraway's (2008) concept of companion species in understanding the human and nonhuman relations as interdependent and coforming, and connects care to these situated relations.

Nevertheless, care is given and received asymmetrically. The care one gives may never be returned by the cared for, but one receives care from someone or something else. (Puig de la Bellacasa 2017, 120–121; 192; 221.) The relations of care can also change and cease, because it is not possible for everything to be cared for, be relevant or exist in the world (Puig de la Bellacasa 2017, 78). Puig de la Bellacasa (2017, 78) defines that "where there is relation, there has to be care, but our cares also perform disconnection". These prioritising disconnections or *"cuts"* reorder and re-create relations between companion species (Puig de la Bellacasa 2017, 78). Hence, ultimately, Puig de la Bellacasa's (2017) concept of care can be understood as nonsymmetric, multilateral actions of care which flow and circulate through complex webs of companion species.

Puig de la Bellacasa (2017, 3–5; 69–70; 217) approaches care as three-dimensional: labour/work, affect/affections and ethics/politics. The first dimension labour/work emphasises caring as doing maintenance and concrete work, hence I refer to it from now on as *doing care*. Doing care is often about mundane every day practises, because it maintains life and the networks of companion species. (Puig de la Bellacasa 2017, 1–4; 70; 120–121.) Yet it also includes practises that are done less frequently, because doing them often would be ineffective or damage the carer or cared for. Therefore doing care is also about the right distance, because care, as well as carelessness, can both sustain and destroy (Puig de la Bellacasa 2017, 1–5; 70).

The second dimension affect/affections is about *affectivity*, such as love, joy, boredom and burden which can be part of care (Puig de la Bellacasa 2017, 4). In social sciences feeling, emotion and affect have different conceptual meanings (Jokinen & Venäläinen & Vähämäki 2015, 18). Feeling is something that one feels in or on their body and it does not necessarily have linguistic or social expression, because as one starts to describe feeling, it is often categorised as emotion. Emotion is something culturally understood that one can recognise cognitively and name linguistically. Hence emotions form in interaction, one can talk about them and also pretend them. Whereas affect relates to feeling and emotion, but is something more ambivalent, something societal and perhaps structural, bodily and intimate, which impacts on people and makes them act. Yet the differentiation between feeling, emotion and affect is relative and in practise wavering, because as one starts to explain their affect they in a way turn it into the language of emotion, which brings emotion present. Nevertheless, affect can not be turned into an emotion or explained comprehensively. (Jokinen & Venäläinen & Vähämäki 2015, 18–23.) Therefore, affects can make humans care or not to care, and doing care can foster both positive and negative feelings, emotions and affects (Puig de la Bellacasa 2017, 4–5).

The third dimension ethics/politics is about the ethical and political dimension of care (Puig de la Bellacasa 2017, 4; 70). Ethics is intertwined with politics of everyday living (Puig de la Bellacasa 2017, 130–140), I refer to this dimension as *ethics* from now on. Puig de la Bellacasa (2017, 4; 70) argues the expectation of good care is part of the ethics of care. Doing good care is a personal ethical decision, but Puig de la Bellacasa (70; 151–155) also perceives care as a doing that is permeated by ethicality, because care is inseparable from the relations of companion species and continuation of life. She describes how certain actions become "obligatory" as we care for, or have something or someone to care for us. With obligation she means that, as these certain actions "create and re-create demands and dependencies, they become necessary in a specific world to subsist and thus somehow oblige those who inhabit that world". (Puig de la Bellacasa 2017, 155.) With houseplants this could mean that they are brought indoors for decoration and they require certain actions of care, providing them with good care makes them look better which in turn makes the indoor environment more pleasant and improves the wellbeing of the human carers. Hence demands and dependencies oblige both houseplants and humans to continue care for each other as long as the human carers fulfil the needs of the plants well enough. Puig de la Bellacasa (2017, 4; 70; 151–155) also emphasises that doing good care means supporting sustainable and flourishing relations between humans and nonhumans, and not only survivalist or instrumental relations. Furthermore, ethics is intertwined in the other two dimensions of care, because human carer may feel an obligation to care and this kind of affective doing care has also material consequences (Puig de la Bellacasa 2017, 162–163).

Regarding nonhumans, Puig de la Bellacasa (2017, 218) reflects that ethics is a human thought and it can not be simply presented as nonhumans' experience, because it would anthropomorphise them. She also points out that affectively speaking worms, microbes and other soil inhabitants, most probably, do not care about humans (Puig de la Bellacasa 2017, 218). The same can be assumed about houseplants. Nevertheless Puig de la Bellacasa (2017, 219) emphasises how important nonhumans' care as doing is. Nonhumans might not be intentionally taking care of humans and they might be obliged to do it within some ecological conditions, but they still do care (Puig de la Bellacasa 2017, 219–220). For example, as mentioned in the previous subchapter, houseplants provide physical and mental health benefits for humans. They are agencies who provide care. Ultimately, Puig de la Bellacasa (2017) decentres human agencies and makes room for nonhuman agencies, but keeps ethical and affective dimensions of care as a human issue.

The three dimensions of care appear also in plant care guides. For example, Hannele Hietala and Esko Puupponen (1981, 24) state how the central idea of the houseplant hobby is that one becomes attached

to their plants. Hietala and Puupponen (1981, 24) describe how houseplants are living beings that need to be cared for, sometimes even daily, and as people take care of houseplants, their skills to care for them advance and the plants become more important to them. They also mention how unhealthy uncared for houseplants do not grace the residence and how unthoughtful it is to place a living plant in an environment that does not support its needs (Hietala & Puupponen 1981, 24). Plant care guides contain numerous guidelines how to care for houseplants, in other words *do care*, that also indicates the obligation to care which derives from bringing plants indoors. Furthermore, in the previous example Hietala and Puupponen (1981, 24) shortly denote the affective dimension, attachment, that is present in caring for houseplants, and display the ethical dimension: one should not let their houseplants suffer and die, but help them to grow and flourish.

3.5 The research questions

The different theoretical and methodological discourses about plants, humans and other nonhumans are part of co-constituting the human-plant relationships. Similarly, companion species and actor network theory are discursive practices that produce reality, but they also enable to comprehend humans, houseplants and other nonhumans as co-constituting agents, and hence assist comprehending what is happening between these agents in material reality. Haraway (2008, 4) talks about "the cat's cradle games in which those who are to be in the world are constituted in intra- and interaction. The partners do not precede the meeting; species of all kinds, living and not, are consequent on a subject- and object-shaping dance of encounters." Concerning the topic of this thesis Haraway's depiction can be interpreted to emphasise how humans, houseplants, discourses about them and some other nonhumans are part of co-creating each other and are in continuous process.

I am interested in examining the co-creating relations and processes in human-houseplant relationship. As Puig de la Bellacasa (2017) clarified care flows and circulates in the relations of companion species. Human's care enables houseplants to live in indoor environments and houseplants to care for humans physically and mentally. Therefore, I consider how the relations of humans and houseplants are produced in indoor environments through care. I understand care by Puig de la Bellacasa's (2017) concept of three-dimensional care: labour/work, affect/affections and ethics/politics. Hence my research questions are the following:

1. How does doing care produce the relationship between humans and houseplants?
2. How do affect and ethics emerge from these relations?

Actor network theory, companion species and Puig de la Bellacasa's (2017) three-dimensional care enable me to focus on concrete material practises. Therefore, after presenting the research data and methods, I begin by examining the practises of doing care and the relations that are present in them, and then see how these relations involve the other two dimensions of care, affect and ethics. Puig de la Bellacasa (2017, 5) describes that the three dimensions of care "are not necessarily equally distributed in all relational situations, nor do they sit together without tensions and contradictions, but – – staying with the unsolved tensions and relations between these dimensions helps us to keep close to the ambivalent terrains of care". Therefore, to stay with the tensions I follow Power's (2005, 43) emphasis of how gardening is not just harmonious relations, but includes collaboration, negotiation, competition and challenge, and examine how these four actions are present in caring for houseplants: when one negotiates with their houseplant, trying to figure out where it gets enough light, in which direction it should grow and how large it can grow.

4 Empirical data and research methods

Feminist studies have questioned the traditional scientific understanding of value-neutral objectivity of the researcher, because researcher is not a wholly objective observer but situated in the world, and hence produces and interprets the world and the research based on their own experience and the knowledge they have assimilated (Lykke 2010, 125; 130; Haraway 1998). Therefore I have aimed to be aware of how I have produced this research and reflect on my choices. In this chapter I introduce the research data, which consists of semi-structured thematic interviews and pictures of houseplants. I describe how I collected the data and what kind of ethical considerations I made. I also present the process of data analysis and how it involved content analysis through actor network theory, companion species and Puig de la Bellacasa's (2017) three-dimensional care.

4.1 Interviews

I conducted the interviews during January and March 2019. I decided to interview people who had houseplants and took care of them, because I figured that with interviews I could get more in-depth information of the relationship a human carer has with their houseplant and could also try to make the plants be more present in the data. I started preparing for the interviews by creating an interview guide simultaneously in Finnish and English (see Appendix 1 & 2). I was interested in what kind of actions of care people took with their plants and what did they think about their plants. Therefore I read two plant care guides, Lena Månsson's *Ruukkukasvit: Yli 500 kaunista kasvia (Potted plants: Over 500 beautiful plants)* and Katarina Stenman and Anders Wennström's *Huonekasvit (Houseplants)*, and reflected on them to understand what houseplants basically need and what kind of pests may bother them. I also discussed with my student colleagues, followed the discussion in several houseplant groups in Facebook and thought about my own and my relatives' experiences with houseplants. This helped me to create a preliminary understanding of the phenomenon I was researching.

Many people have houseplants and care for houseplants, hence I only had to figure out how to contact them. I ended up to use snowball sampling as I searched for interviewees. In snowball sampling researcher seeks potential research participants from people who know people who would be information rich, and hence good interview subjects (Patton 2002, 237; Patton 1990, 176; 182). My colleagues knew persons who had houseplants, I knew my relative had houseplants and my supervisor, Marja Vehviläinen, recommended The Martha Organisation, because she had studied urban agriculture and Marthas before (Vehviläinen 2014). The Martha Organisation is a home

economics organisation that, inter alia, gives guidance for taking care of plants. Therefore I requested a local gardening counsellor Martha to contact gardening Marthas about my study and I interviewed the Marthas who replied to this contact.

In the end I had six interviewees who were fluent in Finnish, one male and five females, their age ranging from mid-twenties to seventies. One of the interviewees was my relative, two were friends of my colleagues, and the other three were members of the Gardening Marthas of Pirkanmaa -organisation (Pirkanmaan Puutarhamartat). The interview with my relative was a pilot interview, but I included it to the data, because we conducted the interview in a way that did not significantly differ from the other interviews and the interview enfolded unique information.

I contacted the interviewees via email or WhatsApp. I told them the main points of my research and the interview, such as I was interested in how they took care of houseplants, and would record the interview and visit their home. I visited five interviewees' home because I considered having their houseplants present in the interview situation was important. The houseplants' presence could affect how the interviewees talked about them. For example, it could make the plants more concrete and easier to talk about, because interviewees could observe the plants at the same time as they talked about them. Consequently, having the houseplants present in the interview situation could also make the plants be more present in the interview data. The interviewees might, while talking, for example touch a plant and observe whether the plant is doing okay. Power (2005) describes in her research that in this way the plants will "emerge through their interactions with the humans". I also conducted one of the interviews via phone, because the interviewee lived quite far away.

At the end of the interviews the five interviewees whom I visited took me to a tour where they introduced me all their houseplants, told me a little bit more about them and I took pictures of the plants. These houseplant tours were a way to better understand what the interviewees had told me and allowed the interviewees to interact with the plants and tell me more about them, but often we had already observed some of the plants during the interview, because we sat close to them. I took about four pictures per interview. The pictures I took focused mainly on the plants that interviewees had talked about and I tried to include a whole plant or a couple of plants in these pictures. Yet, if possible, I took some pictures that illustrated many plants and how the plants had been placed in the indoor environment. The interviewee whom I phone interviewed sent me three pictures of their houseplants which broadly illustrated where the plants had been placed. In addition, one of the interviewees whom I visited sent 11 pictures in addition to the four pictures I had taken. Their pictures focused mainly on

blooming houseplants and were mostly pictures of the whole plant or some parts of it. The length of the interviews (houseplant tours included) ranged from 43 minutes to 1 hour and 10 minutes.

As an interview method I used semi-structured thematic interview. In a semi-structured interview all the interviewees answer to the same themes, but the presentation and structure of questions may differ (Ruusuvuori & Tiittula 2005, 11). This allowed me to let the interviewees talk more freely about their experiences and adjust the questions to their answers. Yet we did not significantly stray from the structure of the interview guide (see Appendix 1 & 2). I had four main themes in the interview guide. The first theme was about background information of the relationship interviewee had with their houseplants, the second was about how they knew how to take care of houseplants, third was about the way they cared for the plants, and the fourth was about what the plants meant to them and how having houseplants had impacted on them. Yet the division of questions was not straightforward between the themes. Some of the questions could have belonged to another theme or perhaps belonged to their own theme that I included to the other four. I tried to organise the themes and division of the questions in a way that would make asking and answering the questions easy, because as Johanna Ruusuvuori and Liisa Tiittula (2005, 24, 41) advise, researcher guides an interviewee to the interview situation and in a way builds the situation with broad and easy first questions. Therefore I tried to ensure that the interview situations could be well-structured and flow conveniently.

I formulated the questions of the interview guide (see Appendix 1 & 2) to be open-ended or continued closed-ended questions with an open-ended question or a request to tell more, so that the interviewees would describe their own experiences. During the interviews I sometimes asked clarifying questions from the interviewees to make sure I had understood what they had told me. Yet I aimed to avoid presenting clarifying questions that would strongly lead or pressure the interviewee to answer in a specific way and therefore perhaps discourage them from telling their own experience. Yet I did not always succeed in this objective. For example, during one of the interviews an interviewee told me about a climber (Stephanotis floribunda) that grew very fast and irritated her. I asked why did it irritate her and continued by asking did the climber take too much space when it would have been better to just wait for the interviewee's reply without asking the second question that emphasised more my interpretation of the situation. Fortunately the interviewee answered with a very specific description of her experience and then also pondered a bit for my second question and partially agreed with it, but emphasised her own interpretation. During another interview I almost asked a very leading clarifying question, but in the middle of asking I realised what I was doing and quickly fixed the question.

Researcher: Would it perhaps be a bit like... or can you say, why do you consider it is nice that there are plants all around the house? (Extract 1)

Ruusuvuori and Tiittula (2005, 11–13) point out how researcher and interviewee produce the interview together through interaction, and hence both of them impact on producing the knowledge. Yet they have different roles in the interview setting: researcher collects information and interviewee provides the information (Ruusuvuori & Tiittula 2005, 14). Researcher has initiated the interview and guides it to certain themes by asking questions and encouraging interviewee to continue with empathic expressions, but the researcher is expected to do this in a neutral manner (Ruusuvuori & Tiittula 2005, 44–51; 2017, 80). Yet Ruusuvuori and Tiittula (2005, 44–51; 2017, 80) admit that interview as an interactional situation may require the researcher to be more than a passive listener, because interviewee may interpret passivity as a lack of interest. Yet certain kind of neutrality is perceived as part of professionalism (Ruusuvuori & Tiittula 2005, 44). Therefore, I interpreted that neutrality could be understood as politeness, composedness and respect towards the interviewees, and focusing on understanding their experience.

I encouraged interviewees to tell me more by nodding my head and with short affirmations or sympathetic expressions, such as yes, mm-hmm or oh no, but at times I also described my own experiences. By describing my own experiences, I aimed to show that I understood what the interviewees meant and tried to encourage them to tell me their own experiences. Yet this could also be problematic. It is possible that by describing my own experiences I made the interviewees feel they did not need to explain themselves so precisely, because I had houseplants too and hence would already know some of the things they were telling me. My experiences also interrupted the general structure of the interview situation where researcher is supposed to ask questions and listen to the interviewee who has the information (Ruusuvuori & Tiittula 2005, 33–35).

I have watched and helped my mother to care for her houseplants since I was a child and I have had a couple of houseplants of my own every now and then. Nonetheless, only during the last three years I have started to have more houseplants and become more interested in caring for them. Hence I would say I have some experience, but I am not an expert in caring for houseplants which has also motivated me to learn more by doing this research. I brought this up with some of the interviewees as we conversed before or after the interview. Yet it would have been good to mention to every interviewee before the interview and simultaneously encourage them to tell their own experiences.

My own experience and understanding of houseplants also impacted on how I interpreted the interviewees' replies during the interviews. I tried to stay attentive to the different habits of taking care of houseplants, but at times I did not realise to ask the interviewees to describe something more precisely or clarify why they did something. At times this happened because I thought I understood what they meant. For example, as one of the interviewees described how she had tried many different things to make her cactus (Echinopsis eyriesii) bloom and among other things mentioned "torturing" the plant by keeping it in a dark and cool place. I did not ask clarifications because I had read some plants may require this kind of specific treatment to bloom. Yet it could have been good to ask clarifications in some of the cases like this, because it could have led to finding out something interesting and unexpected. There were also times when the interviewees said something very interesting and I would have wanted to ask more, but I did not know what I would ask and how.

Nevertheless, at times my own experiences resulted to further discussion and new topics. For example, one interviewee described how it was interesting to follow how his Monstera deliciosa made new leaves and opened them. I replied to this by telling how I had read from a Facebook group that the new leaves are very tender and the interviewee agreed with this and continued with his experience about the tenderness of the new leaves.

I did not have previous experience of doing interviews and even though I prepared for the interviews and they went well in general, I noticed how my inexperience as an interviewer impacted on the way I was able to produce the interview situations and come up with clarifying questions. Interviewing requires researcher to be able to focus on multiple tasks at the same time, such as listening, processing the new information, asking clarifications, guiding the interview, following the structure and questions of the interview guide and following the time frame of the interview. Nevertheless, the interviews were fruitful and enabled analysis.

The length of the interviews was 5 hours in total. After transcription of the recorded data I had 78 pages of data, which was around 28 000 words. In the transcription I focused on the content of what was said, hence as I transcribed I left out my short affirmations and sympathetic expressions, most of the filler words, parts that did not touch the topic of the research and my descriptions of my experiences with houseplants if the interviewees did not comment anything based on them. Yet, I included the questions I asked, in order to be able to compare whether I had made significant differences in them and whether this could have impacted on the answers I received.

While transcribing I anonymised the interviewees and interviews, for example, I left out the interviewees' names and identified them with a number, such as interviewee 1, interviewee 2, interviewee 3 et cetera, or respectively I(1), I(2), I(3) et cetera. If the interviewees mentioned a family member by name I changed the name to familial relation. I identified the houseplants by their universal Latin names, except for the interview extracts in which the interviewees talked about the plants by their common names. I translated the Finnish common names of the houseplants into English common names and included the Latin names of the plants in parenthesis. I conducted the interviews in Finnish, hence the interview extracts in this thesis were translated from Finnish to English. I translated them accurately. The original extracts are included in the Appendix 4.

I gave interviewees the consent form (see Appendix 3) in the beginning of the interviews at the same time as I briefly told them about the topic of the research, recording the interview, the voluntary nature of participation in the research, destroying the collected data when the research is finished and the protection of their privacy. In addition, as I took pictures of the houseplants during the houseplant tours, I showed the pictures to the interviewees, so that they could agree on them. We also discussed about not including personal information to the pictures, such as family portraits.

4.2 Abductive content analysis

I employed abductive approach in this research as my interpretation of the data relied on both the empirical data and theory. In abductive approach the analysis is mainly based on empirical data, but theory provides some guidance to the analysis (Tuomi & Sarajärvi 2018). Silvasti (2014, 43–44) explains that theory and researcher's knowledge are allowed to guide the analysis, but researcher can listen to the empirical data and form patterns and themes from it. Therefore the emphasis of theory and empirical data is versatile. I acknowledge that theory was a leading thought in my analysis, but I drew new aspects to it from the empirical data. For example, when I was doing the interviews I was not yet convinced I would use Puig de la Bellacasa's (2017) concept of three-dimensional care. Hence I did not particularly ask interviewees to describe their emotions or did not guide the interviewees to describe affects or ethics. I was mainly interested in how interviewees cared for their houseplants and the interaction between humans and houseplants. Then as I examined parts of the transcribed data for the first time I noticed the presence of doing care and emotions in it, which encouraged me to employ Puig de la Bellacasa's (2017) approach of care. Therefore, the interview data and theory were in a dialogue and I learnt new aspects from the empirical data.

Johanna Ruusuvuori, Pirjo Nikander and Matti Hyvärinen (2010) say that the research problem guides the analysis and the empirical and theoretical observations made of the data. Therefore, as I had printed all the transcribed and anonymised interviews and started to read them through, I returned to my preliminary research questions. Informed by actor network theory and the different relations that could exist between humans, objects, animals and ideas, I particularly looked for consistencies which were about doing care, seemed to affect doing care or stemmed from doing care.

However, while transcribing I had already paid attention to some of the patterns that were present in the interviews, such as emotions, different schedules for taking care of houseplants and plant propagation. I also expected to find certain actions of care from the data, such as watering the plants, placing them into light, repotting them and fertilising them, because these patterns appeared already in the plant care guides. In addition, I had made specific questions about these issues, since I knew they were common in caring for houseplants. Hence, as I read the interviews through while underlining some words and sentences and writing notes to the margins of the papers, I simultaneously considered possible themes for these observations, and in which themes my observations could belong. Regardless, I also tried to keep my mind open for new patterns that I had not noticed or considered significant before, such as the significance of the interior design, pruning and cutting houseplants, and "plant sitting" which means taking care of someone else's houseplants for a certain amount of time.

This kind of data analysis method is called content analysis. In general, it is a qualitative data method that aims to identify significant consistencies and meanings from a certain set of qualitative material. This is often done by searching frequent patterns from the material. (Patton 2002, 453.) My analysis combined content analysis, actor network theory, companion species and Puig de la Bellacasa's (2017) three-dimensional care: doing care, affect and ethics, because I let these theories guide what kind of patterns I identified from the data. For example, doing care made me focus on the concrete practices and actions of care, whereas actor network theory guided me to be aware of the different human and nonhuman agencies that were present in these actions and assisted me to be sensitive of the networked co-constituting relations between them. Companion species made me reflect on the relations and how the different agencies co-constituted each other and affected each other. Furthermore, I considered how the dimensions of affect and ethics were present and impacted doing care and the relations. Therefore these theories helped me to broaden my scope of observations and simultaneously also guided my observations.

Tiina Silvasti (2014, 43–45) describes that after dismantling the data and identifying significant consistencies from it, the found patterns are usually grouped as themes. The themes aim to provide new information and answer to the research questions (Silvasti 2014, 43–45). Following actor network theory, companion species and Puig de la Bellacasa's (2017) three-dimensional care I had searched relations and actions from the data and already considered possible themes. Therefore, as I started to group the patterns I had found into themes I kept the actor network theory, companion species and three dimensions of care in my mind. For example, human relations and community seemed to largely entangle with doing care based on the interviews, as well as did the indoor environments which strongly impacted on the houseplants.

After grouping the notes and extracts I had underlined under themes I rearranged and renamed some of the themes several times. Sometimes I checked the original interviews to see the context and whether there were related patterns that I had missed. The extracts I had underlined often related to multiple themes and I tried to decide which one of the themes I should interpret as the main issue in each extract. Silvasti (2014, 45) defines that forming of themes helps the researcher to focus on relevant issues on the research and therefore during it some of the found patterns can be omitted from the research. I considered learning and knowing to be included in doing care, hence I did not separate it as its own theme. Wealth and the price of houseplants or the price of caring for them seemed to impact on doing care at times, but there were only few mentions about money in the data, hence I did not create a separate theme for it either. I had asked the interviewees whether their pets impacted on how they cared for their houseplants, but the interviewees who had pets said the pets did not care about the plants. Furthermore, I aimed to be aware of how the language and the categories and meanings within it could impact on doing care, but I did not separate it to its own theme either, because I did not want to move my focus excessively on discourses. Eventually, I had five themes: doing care, human relations and community, relations of indoor environments, affects, and ethics. I analysed these themes, but then fused the analysis of the relations of indoor environments theme into the other four themes, because not separating it as its own theme illustrated better the intertwining of humans, houseplants and their environments. This left me with four themes for the analysis: one for every dimension of care and one for human relations and community. I kept human relations and community as its own theme, because I understood its distinct impact on the relationships of humans and their houseplants when I was analysing the data. In addition, even though I created these separate themes for the analysis the three dimensions of care and the relations of human-houseplant relationships are essentially intertwined.

Ilkka Pietilä (2010) says analysis is done in the language of data and then translated. Hence I searched for consistencies and meanings, formed the themes and organised the data in Finnish. Then, as I started to phrase my interpretations in a more detailed way and improve them, I changed the language into English and translated for example the interview extracts I decided to use. I worked like this because writing the whole analysis in Finnish and then translating it into English would have been a lot of unnecessary work. I would have phrased some issues in a slightly different manner in Finnish, because my Finnish is more fluent than my English and also because of the differences of the languages. It also felt good to change into English at this point of the analysis, because I had worked on the theory part of this thesis in English and it was easier to return to it when the language I used was the same.

My first research question concerns understanding how doing care produces the relationship between humans and houseplants. Hence, I considered what kind of actions of care were present in the extracts of the themes and why caring was done in that way. Power (2005, 42) describes how actor network theory lays "emphasis on the moments of interaction and relation between diverse human and nonhuman actors" and how in actor network theory "agency is understood as an outcome of network building". Puig de la Bellacasa (2017, 70) also emphasises how care is present in the relations of companion species, because they could not exist without care. Therefore, I endeavoured to see the relations through the care that was done, identify the different agencies present, and how they were part of doing care and produced it. I demonstrated this by bringing plants agency present from the interviewees' speech in the analysis. I also brought forth how the different actors, such as ideas of interior design, light, emotions and pests, existed in relation to humans and houseplants, and were entwined in the care the interviewees and houseplants produced.

The second research question addresses how affect and ethics, the other two dimensions of care, emerge from the relations of doing care. Therefore I examined how affect and ethics were present in the care done by the interviewees, and impacted the care and the relations of the interviewees and their houseplants. Furthermore, Puig de la Bellacasa (2017, 5) reminded that care is ambivalent and the three dimensions of care are in tension. Hence, I returned to Power (2005, 43) and her perception of both harmonious and tense actions in gardening, and considered collaboration, negotiation, competition and challenge in caring for houseplants, and whether affects and ethics were present in these actions.

I used the pictures of houseplants I had taken during the interviews to illustrate the interviewees and houseplants' webs of relations in their home environments. The pictures demonstrated and supported the interviewees' experiences and my analysis, as they brought present the materiality of human-houseplant relationships. The pictures also enabled to see the various houseplant species and the differences and similarities of the arrangements the interviewees had made for their houseplants in the indoor environments. I did the interviews in winter and it shows in some of the pictures as a lack of light, because the sun had already set by the time of some of the interviews. I was saddened by the lack of light in some of the pictures until I realised it emphasises how the seasons and light are part of the webs of relations of humans and houseplants.

5 Relations of care between humans and houseplants

In this chapter I present the analysis of the interview data by employing content analysis through actor network theory, companion species and Puig de la Bellacasa's (2017) three-dimensional care. First, I examine how doing care produces the relationship between humans and houseplants in indoor environments. Then I reflect how human relations and community affect doing care. Finally, I consider how ethics and affects, the other two dimensions of care, emerge from the relations of doing care. I emphasise the three dimensions of care, doing care, affect and ethics, differently in the subchapters, but they and the other relations of human-plant relationships are present all the time, only the emphasis differs. In addition, with doing care I examine care done by both humans and houseplant, and how it involves collaboration, negotiation, competition and challenge, which from humans' part can also include ethics and affects.

5.1 Doing care in indoor environments

The size and architecture of a house provide a living environment for houseplants and options to take care of the plants, and hence impact on the wellbeing of the plants. While arranging their homes the interviewees seemed to balance between caring for houseplants and creating a pleasant interior design. Caring for houseplants involved issues such as the available light, watering, repotting, the seasons and available space, whereas interior design focused on cleanliness, liveliness, certain kind of arrangements of colours and shapes, which made the interviewees feel good, or arrangements that enabled them to fit their plants and furniture into the available space. Therefore, in this subchapter I analyse how interviewees cared for their houseplants and how doing care and creating a pleasant interior design involved collaboration, negotiation, competition and challenge.

I begin by presenting a table of the space and resources of care (Table 1, see below), because they are part of how the interviewees care for their houseplants. For example, the interviewees 3 and 4 had smaller apartments than the other interviewees, and they did not have a private yard unlike the others. This could be one of the reasons why they had less houseplants and did not garden, although interviewee 3 had balcony plants in summer.

Table 1	I(1)	I(2)	I(3)	I(4)	I(5)	I(6)
Home	urban area, detached house	rural-like area, detached house	urban area, block of flats	urban area, block of flats	rural area	urban-like area, row house
Gardening	yes	yes	balcony plants	no	yes	yes
Number of houseplants	about 30	about 20	12	8	about 60 (+40)	about 30
Knowledge	by hands-on caring for the plants, from the Internet and plant care guides for new plants	plant care guides, experimenting and caring for the plants	from mother and a course in elementary school, the Internet	from mother, the Internet, by caring for the plants	by trial and error, hands-on caring for the plants	since childhood, books and gardening magazines, lectures

Table 1: Space and resources of care.

All the interviewees had had houseplants for years, but they cared for their houseplants in different ways based on how they had acquired their plant care knowledge (Table 1). For example, they had followed how their parent cared for plants, read plant care guides, searched information from the Internet or participated in lectures. One of the plant care guides (Hietala & Puupponen 1981, 8) instructs that the houseplant hobby is easy to learn by experimenting, but it is a slow process and one can spare themselves from many hardships and griefs by reading and following the tips of those who are more experienced. Yet, many of the interviewees emphasised that they had learnt, and preferred to learn, to care for their houseplants by hands-on caring for them. In Vehviläinen's (2014, 318) research urban gardeners formed knowledge by hands-on urban gardening and sharing experiences, that were sometimes in a dialog with research-based knowledge. Likewise the interviewees of my research had acquired knowledge by hands-on caring for their houseplants in their home environment, reading guides and listening to the experiences of other houseplant owners (Table 1). Interviewee 5, who already had quite a lot of knowledge on caring for plants, explained:

> *I(5): Usually I have done everything by trial and error. You need to make many mistakes and then you can master it.*
> *R: Yes, so it is a bit like at first you fail and then you know that at least this does not work?*
> *I(5): Yes and you always remember it well when you fail. Therefore you always know well what does not work. (Extract 2)*

Hence, caring for plants through trial and error helped him to remember and assimilate what kind of care was good and how he could collaborate with the plants.

If some of the plants did not succeed or faced an accident some of the interviewees tried again with a new similar plant, some of them even managed to save a cutting from the previous plant and nurture it, but often the interviewees also decided that the particular plant did not suit them and did not acquire a plant like that anymore. In general, the interviewees wanted to have houseplants that were easy to care and remained good looking. When I asked what kind of houseplants interviewee 2 had had, she reflected:

> *I(2): Such houseplants that are not too hard to care, I mean I look for plants that are quite easy. Although I have learnt while caring for the plants too, or I do not know whether it is more that the plants have adapted to the care I provide. (Extract 3)*

It is true that houseplants that are easy to care are often more resilient and adaptable plant species. Altogether, the question seemed to be about which kind of houseplants were able to collaborate with each interviewees style of care and rhythm of care, and the indoor environment of their home. Therefore I next present the interviewee's concrete practices of care. After all, doing care is about mundane practices that sustain life (Puig de la Bellacasa 2017, 1–4; 70; 120–121).

The interviewees looked at their houseplants every day, or almost every day. Sometimes they could forget about the plants, but if the plants were somewhere where they were easy to see and notice, they would observe them or, at least, look at them quickly. Interviewee 5 explained:

> *I(5): I actually observe them daily. Every time I walk by they attract me and I have to examine them. (Extract 4)*

Being able to observe and look at the plants was important, because then the interviewees would notice if there was something wrong with the plants, but it was also important because the presence of the plants made the interviewees feel better. The interviewees also enjoyed spotting new leaves, buds or flowers on their plants. This kind of feeling better is part of how plants care for humans.

Although the interviewees often looked at their plants daily they had different schedules for taking care of them. Interviewee 6 described how one of the first things she did in the morning was to go

and look at her houseplants. She observed how they were doing, whether they needed water or there were any pests on them. If there were any withered leaves on the plants, she would pick them away. Interviewee 5 did similar actions when he examined his plants, but he also misted the plants daily and filled the humidifiers about every other day. The other interviewees did not have daily practises like this. For example, interviewee 1 described that she removed the withered leaves once in a week at the same time as she watered the plants. Table 2 presents interviewees' different caring schedules and practices.

Table 2	I(1)	I(2)	I(3)	I(4)	I(5)	I(6)
Schedule	partially	partially	yes	no	no	no
Watering	once and twice a week	once a week or two weeks	once a week	as needed	as needed	as needed
Fertilising	regularly, more in summer	frequently or seldom	occasionally, not in winter	seldom	as needed, more in summer	frequently, not in winter
Repotting and adding new soil	as needed, repotting mostly in spring	seldom repotting, more often adding new soil	repotting every spring, new soil as needed	seldom	as needed	as needed
Other	wiping the dust from the leaves with a cloth		misting, at the latest when there is dust on the leaves		misting, plant lights and humidifiers	watering with rainwater, houseplants in the garden in summer

Table 2: Rhythms of care.

Each interviewee's rhythm of care was combination of their lifestyle and their experiences and knowledge on caring for houseplants. For example, regular watering schedule can make remembering to water the plants easier, but not everyone likes schedules. Interviewees 5 and 6 explained that they preferred to do care when they noticed their plants needed something or they were inspired. Interviewee 3 repotted her plants every spring whereas interviewee 2 did not like repotting and often postponed it. I did not ask about misting and wiping the dust from the leaves of the plants, but interviewees 1, 3 and 5 mentioned it, hence I included it only in their columns (Table 2). Interviewee 6 was the only one who mentioned moving some of her houseplant out into her garden every summer and bringing them back in when the weather cooled in autumn. Some of her houseplants enjoyed this treatment and bloomed beautifully, but some did not like the change of environment.

In addition to the care described above the interviewees also cared for their plants when they noticed something was wrong with them. For example, leaves of a plant could change their posture slightly or droop, change their colour slightly or turn yellow, dry and wither or fall, or the plants growth could be weak or strange in general. In these situations the interviewees would examine the leaves and soil of the plant or the weight of its pot and try to figure out what was wrong and how they could make the plant's condition better. The interviewees acknowledged that the seasons, such as, winter could impact on houseplants, hence they were not too concerned about the plants that were doing fine enough. Yet, if the situation seemed to be severe the interviewees considered different reasons for this, such as whether the plant got enough light, whether its soil was too dry or too wet, whether it needed repotting and perhaps a larger pot, or whether there were some kind of pests on it. When I asked interviewee 3 what she did if she noticed that one of her plants was not doing well, she replied:

> *I(3): For example, when this Pancake plant (Pilea peperomioides) started to look unwell, I figured it out from its leaves that turned yellow and brown and dropped off, so then I actually picked off those leaves and tried to move the plant to a different place. I thought that it should be close to a window so that it would receive as much light as possible, but then I thought that if there is draught coming from the windows it could be cold. In my opinion that Prayer plant (Maranta leuconeura) was cold, hence I moved it there a little further away (from the windows). So it is like this changing the place and picking off the bad leaves. Sometimes also adding the nutrients. I should perhaps learn how much I should water plants. I think that some, especially some of those succulents, may have died due to excessive watering. I should learn that even though they look dry, they are still not necessarily unhealthy, although they are dry. (Extract 5)*

Therefore, the interviewee 3 picked off unhealthy leaves, so that the Pilea peperomioides would focus its energy on the healthy ones and considered reasons, such as, whether the plant needed more light or there was draught. Sometimes she also considered the lack of nutrients and she reasoned that some of her succulents had probably died due to unnecessary watering.

Interviewee 3 was not the only one who watered some of her plants excessively. Interviewee 6 described how she had concluded that sometimes she had watered some of her plants excessively,

given them excessive amounts nutrients, added excessive amounts of new soil in their pots or planted them into an excessively large pot.

> *I(6): If a plant is, in its own opinion, in a too large pot, so that it does not like that, that has happened too, then I change the plant into a smaller pot. I have seen my friends' have their large plants in so very small pots that the soil just rises out of the pot and... I tend to put my plants into a bit too large pots. That I have noticed. (Extract 6)*

Interviewee 6 had noticed that her friends' plants were in too small pots, because the roots of the plants pushed the soil out of the pots. Yet she also admitted that she tended to plant her plants into too large pots. Planting a plant in a large pot can feel like good care, but according to a plant care guide (Hietala & Puupponen 1981, 425) it can be harmful for the plant, because if there is a lot of wet soil the roots of the plant can not absorb all the water efficiently and high amounts of water can make the plant suffer. Hence interviewee 6 was reflecting on the suitable amount of care. Likewise interviewee 2 considered the amount of watering:

> *I(2): At first I think whether I have watered too much or whether I have watered too little. I think that is the first one, but after that I do not... perhaps I can change the place too, so that I try whether it would flourish better in some other place. Yet I have noticed that sometimes if you change the place too much the plants will not like that either. So perhaps that one particular place is better for them than looking for new places and then they will not flourish anymore. They begin to turn yellow or something like that. (Extract 7)*

The interviewees and their plants were negotiating about the appropriate amount of care which reminds how Puig de la Bellacasa (2017, 1–5; 70) described that care is about closeness and physically doing care, but also about the suitable distance and caring by giving the other some space.

Overall, the poor condition of a houseplant could be caused by neglect of care, excessive care or change in the environment. Puig de la Bellacasa (2017, 220–221) reflects how "the care and neglect that have been put in circulation in the past are still in circulation". Likewise the previous care and neglect are present in caring for houseplants and identifying the houseplants current condition. In the lack of common language, one needs to recall and observe what they have or have not done and know

what a plant might require to be healthy, so that they can give the plant appropriate amount of suitable care. As the previous extracts show, it can be challenging.

Placing the houseplants in an appropriate place was important part of caring for them and decorating home, hence I next look into what kind of practices of doing care it involved. All the interviewees considered that houseplants needed adequate amount of light and thus usually placed the plants close to the windows, except for the plant species which did not need as much light. For example, interviewee 1 considered the wellbeing of the plants and convenience as I asked where she had placed her houseplants.

> *I(1): All of them are in front of the windows, so that determines my interior design. All the window spots have to be reserved for plants. I would gladly place plants elsewhere as well, but I have always doubted whether they would survive in a shadier corner, even though it would be nice to try it. I would like to have plants all around. On the other hand, it is easier to care for them when all of them are in groups. (Extract 8)*

Therefore, interviewee 1 collaborated with the needs of the houseplants which together with the indoor environment partially prevented her having the interior design she would have preferred. Yet she considered it positive that the current interior design made caring for houseplants easier. Similarly, interviewee 6 collaborated with the needs of her houseplants as most of her plants were in front of the windows on narrow tables or in plant hangers. She explained:

> *I(6): I just like that the plants are a bit like a curtain there. (Extract 9)*

I interpret that the plants cared for her by in a way protecting her and preventing outsiders from seeing in her home (Picture 4 and Picture 5). Furthermore, interviewee 6 pulled the blinds up if the weather was cloudy, so that the plants would receive more light. Yet she had to be careful that the sun was not shining when the blinds were up, because her freezer was close to the kitchen window. As a result, she balanced between caring for her plants and her freezer, since both of them belonged to her web of companion species and competed for her care.


Picture 4 and Picture 5: Plants as curtains in front of the windows.

Unlike the other interviewees, interviewee 5 had plant lights which impacted the interior design of his home. He described that he often moved his houseplants and considered the needs of the plants by placing the plants which were originally from deserts and dry places closest to the plant lights. He also had Epipremnum aureums that he had hang up on the ceiling with the help of hooks and clothes lines (Picture 6).

> *I(5): Those climbing vines are on the ceiling and wherever, hence they receive just ambient light and that is enough for them, because they have originally grown as an undergrowth in the rain forests and they do not receive that much light there either. They also need humidity and that is why I have humidifiers. (Extract 10)*

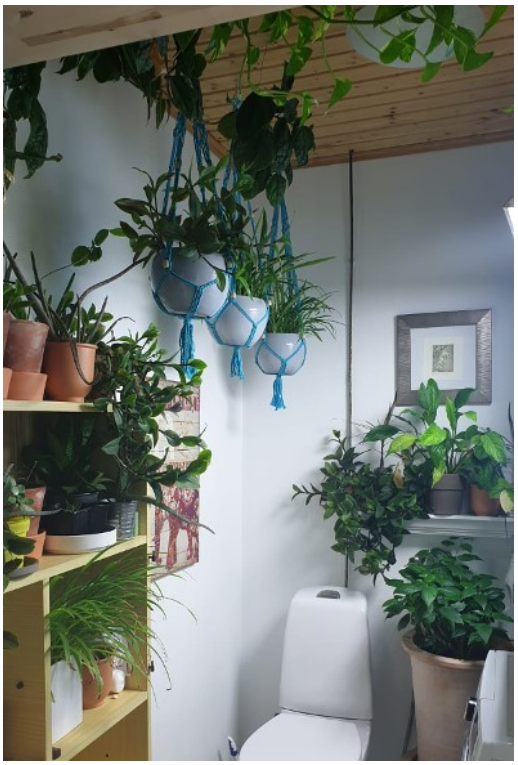
Interviewee 5 also explained about the LED light in his combined kitchen and living room:

> *I(5): It is that kind of LED light which emits similar white light as the lights used in light therapy. It is quite similar wavelength, hence it is good for human mind as well, and because of the light houseplants do also well in winter here. (Extract 11)*

Furthermore, he had about 20 houseplants and a plant light in his bathroom, which made the bathroom a very verdant and pleasant place (Picture 7). Therefore, having plant lights seemed to enable much

more unrestricted decoration with plants and simultaneously secure the wellbeing of the plants which also supported their human carer's well-being. Plant lights could support collaboration between caring for houseplants and pleasant interior design which otherwise could be restricted because of, for example, the size of the windows or the architecture of the house. Interviewee 5's use of plant lights shows how technologies can be adopted as part of caring for houseplants and how technologies alter care and its material relations.

Picture 6: Vigorous Epipremnum aureums and ambient light.



Picture 7: Verdant bathroom.

Without plant lights the architecture of a house and the seasons could together make the interviewees, for example, consider moving some of their plants closer to the windows in winter, so that their plants would receive enough light, and protecting some of their plants with curtains from the scorching heat in summer, so that the plants would not burn their leaves. Interviewee 3 had moved in her current apartment in autumn, hence she did not know what kind of place it was in summer. Yet she considered moving her plants further away from the windows, because the windows faced to the South or West and probably none of her plants would thrive in such a heavy sunlight in summer.

> *R: There are no blinds there or anything, so that you could cover them?*
> *I(3): No in this apartment there are none and this is a rental apartment, hence I can not have them either. In addition, I like this bay window, hence I have not wanted to hang curtains here. Then again with curtains I could protect the plants a little bit, but then it hides the beautiful shape of this bay window. Depending on the situation I have to see what I do. (Extract 12)*

Interviewee 3 considered that it would not be too much trouble to move the plants, and as one can see from the Picture 8 the plants are relatively small. Yet this interview extract distinctly shows challenge and negotiation between having a pleasant interior design and caring for houseplants in the existing indoor environment.

Picture 8: Houseplants and the beautiful bay window.

Many of the interviewees considered that caring for houseplants did not require much time, but it was rather a question of prioritising and remembering. Sometimes human carer could forget about the

houseplants because they were busy doing other things and sometimes they just did not feel like repotting, changing the soil or watering the houseplants, because they could always do it a little bit later. I interpret this as negotiating about the time of care. Interviewee 2 described that the number of her houseplants varied in cycles, so that sometimes she had more houseplants and sometimes less, depending on how busy she was. She remembered that when her children were small she had less houseplants. Interviewee 5 was used to spending a lot of time taking care of his plants, but now he was having an extremely busy time in his life, because he was studying and his children were small. Hence he did not have time for anything in the same manner that he had used to have. He told how they had moved from their previous home and he had borrowed some of his plants to his friend. Then he continued:

> *I(5): They have been there for over a year by now. There are probably over 40 of them there. I should go and get them back at some point. I have been like "no, please keep them for now. At some point I will come and take some of them back, but I will not take all of them". (Extract 13)*

This implies that one can not care for everything and interviewee 5 could not care for as many houseplants now that he had small children of his own. As Puig de la Bellacasa (2017, 78) explains, these kinds of prioritising cuts are part of care and reordering the relations between companion species.

In summary, each interviewee had different rhythm of care based on their lifestyle and their plant care experiences and knowledge. Their doing care consisted of regular practices, such as observing and looking at the houseplants every day or almost every day, and observing the houseplants' need for water daily or at certain times in a week or two. Yet, there were also irregular practices that occurred when the regular care failed and houseplants signalled poor condition. This indicates the agency of houseplants and how the changes in them made the interviewees act, because the interviewees had learnt to collaborate with the plants and interpret certain changes as a request for care. Yet interpreting the needs of houseplants properly could be a challenge, and failing in interpreting could cause cuts and reordering in the relations of the human and houseplant. In addition, the houseplants also competed for the interviewees' care with other beings or matters that were part of the interviewees' webs of relations, such as their children or freezer. Furthermore, the interviewees wanted to care for their houseplants and create a pleasant interior design, but the architecture of their house could restrict this and create demand for negotiation of where the houseplants could be placed,

for example, so that they would receive appropriate amount of light. Yet technology, such as plant lights, could reconfigure the material relations of care and enable new ways to decorate with and care for the plants.

5.2 Houseplants in human relations and community

The interview data contained many mentions of human relations, such as friends and children in the end of the previous subchapter, and these relations were intertwined with doing care. Altogether caring for houseplants seemed to be a hobby that interviewees sometimes shared with their friends, family members and hobby groups. It could be a way to spend time together, compare plant care skills, learn, get inspired, share experiences and possibly create and strengthen relationships. Therefore caring for houseplants enfolds a social aspect and, in a way, opens a new social realm for those who are involved in this hobby. Talking about houseplants and caring for them together can also create a sense of community. Hence, in this subchapter I look closer to how interviewees' caring for houseplants created and sustained human relations and community and how it in turn impacted houseplants.

Among the interviewees the most common way to acquire houseplants was receiving houseplants as gifts (Table 3). The gifted plants were either cuttings or larger plants. Interviewee 4 had received all her current plants as gifts. Interviewees 5 and 6 preferred receiving or acquiring plants as cuttings or larger plants to purchasing them from a store, whereas rest of the interviewees purchased houseplants, for example, from stores, flea markets, garden fairs or other hobbyists. The way a houseplant was acquired was significant in some cases, because it attached memories and affects to the plant.

Table 3	I(1)	I(2)	I(3)	I(4)	I(5)	I(6)
Plants usually acquired	purchased, some received	received, purchased	purchased, some received	received	received, adopted	received, exchanged

Table 3: Different ways to acquire houseplants.

The memories and affects could make a houseplant more special. Interviewee 4 had received a Pilea peperomioides from her friend, and Zamioculcas zamiifolia when she had moved out of a commune. Hence the Pilea peperomioides reminded her of her friend and Zamioculcas zamiifolia reminded her of her old home and roommates. She treasured these memories and relationships and because of this she also liked these plants more. Likewise, interviewee 6 treasured a Eucharis amazonica, which she

had received as a wedding gift in the year 1970. These plants were memorable, because there was a memory of a person or an event attached to them. At times a human relationship that was attached to a plant was the main reason to have a plant, that did not otherwise please the carer. Interviewee 3 had mentioned that she did not like succulents and, as she presented her succulents, she said:

> *I(3): This is the one I received from my spouse, but this is indeed. I do not particularly like this one, but it is nice because I received it from my spouse. (Extract 14)*

Plant propagation, which means a process where new plants are grown from seeds, cuttings and other plant parts, was a common part of the social aspects of caring for houseplants. Interviewees told how they received, and sometimes exchanged, mostly cuttings from their friends, family members and acquaintances. For example, two interviewees told how they had received some of their plants as cuttings from the plants of their childhood home, one interviewee had received a cutting from her co-worker's mother's 40-year-old plant, and one interviewee exchanged seeds and cuttings with other hobbyists in spring. Interviewee 1 had admired her friend's Hibiscus rosa-sinensis and received a cutting from it. The cutting reminded her of her friend and she said:

> *I(1): I consider the plant is different, because I know it is a clone of my friend's plant. In that way it reminds me of my friend. (Extract 15)*

I paid attention to the word clone, which implied that the interviewee acknowledged that both of the plants had the same genetic characteristics. It also reminded how plants are actually not individuals, but could be understood more like colonies (Mancuso & Viola 2015, 78; 125; 137). Interviewees 1, 3, 5 and 6 had described how they took cuttings or divided their plants as part of caring for them and some of them gifted these new plants to their friends, family members and acquaintances. It is interesting to think this from the perspective of the plants, because these actions of care and human relationships allowed the houseplants to move and spread out to new areas and environments. The interviewees were collaborating with these plants, perhaps unintentionally. If the plant was appealing, grew rapidly or produced many offsets it was more likely to be gifted or exchanged. This also mirrors how plants have been spread by humans and with human actions (Szczygielska & Cielemęcka 2019, 2–5).

Some houseplant colonies can grow very old if they are gifted and exchanged many times. Interviewee 4 told a story how she had received her first houseplant, Chlorophytum comosum, during her first elementary school years and mused:

> *I(4): The teacher whom I received that plant has probably been dead for a long time. Is it not slightly weird to think that I still have her plant? But then again it in a sense is not exactly the same plant, because it has been propagated, but maybe it still in a way is. (Extract 16)*

Therefore interviewee 4 thought about the previous relations of the plant and how the plant carried the memory of her possibly late teacher. Interviewee 5 had many plants that had been previously cared by someone else and he explained:

> *I(5): I think it is nicer to receive a plant that has some history. For example, at some point my spouse went to get some houseplants that were given away in a flea market group of Facebook. There were plants that someone had had for 20 years and they were not able to keep them anymore and something like that. That is so nice. I rather have a plant like that than go and buy some plant for 4 euros from Plantagen. (Extract 17)*

Hence, interviewee 5 appreciated plants that had already been cared for and carried the relations of their previous carers. It perhaps made them more special and personal than plants that were available in a store in large quantities. Old and traditional houseplants are also commonly appreciated among houseplant hobbyist, especially because they can be cultivars that are rare nowadays. Yle Turku collected stories of old houseplants in Finnish homes in 2014 (Lehtilä 2014a; 2014b). When I asked interviewee 3 whether her attitude towards plants had changed during the time she had taken care of them, she pondered:

> *I(3): Yes I suppose. The longer you have the plants the more you in a way care about them, because they have survived for that long. Somehow I still have a general idea about plants that they are more mortal than humans and animals. I mean, that they do not live as long. Then again some plants, such as the Pothos (Epipremnum aureum) which I received from my friend, have been propagated from a 40-year-old plant.*

Somehow that perhaps makes you want to care for them more when they live longer. (Extract 18)

Interviewee 3 acknowledged that caring for houseplants made one attached to them, but she also appreciated old houseplants for their age. Perhaps appreciating old plants for their age is sometimes also appreciating the time that has been spent caring for them by the current carer and also the possible previous carers.

Interviewees did not receive only plants as gifts. Interviewee 5 mentioned that he had received most of his pots from other people and interviewee 4 had received a new watering can as a Christmas gift. Therefore friends and family's support could make caring for houseplants easier. Some interviewees cared their houseplants together with their close ones, for example interviewee 4's mother took care of fertilising, repotting and adding new soil to her plants, whereas interviewee 3 had shared the tasks with her spouse.

I(3): We have a nice division of work in a way that I take care of misting and repotting and things like that, but my spouse usually waters the plants. (Extract 19)

Friends and family's support was also needed when houseplants could not be cared for, for example, because of going on a trip or moving. In situations like this one needed someone to look after their plants, because even with good preparations houseplants could not survive too long on their own. At the moment of the interview interviewee 4 was plant sitting two of her family member's plants and interviewee 5 and 6's friends were plant sitting some of their houseplants. All the interviewees had, at some point, had someone to look after their houseplants while they were unable to do it.

At times the other human relationships could be troublesome for the human carers and houseplants, or even harmful for the plants. For example, all the three interviewees who had children mentioned that their children had at some point mistreated or accidentally dropped some plants. Interviewee 5 also said that there was not much space left, because all the houseplants had to be placed up on the tables, shelves or hanging planters, so that the children would not reach them. Interviewees 5 and 6 had also saved poorly cared houseplants from their friends and managed to make them thrive again.

Furthermore, plant sitting could produce trouble or conflict in the relations of houseplants, their owners and other humans. Interviewee 4 was nervous about plant sitting and explained:

I(4): I wish the owner of this plant would retrieve it soon. I perhaps do not really know how to care for this one. The water runs through its soil very fast and I used to water it more, but now it drinks even more. (Extract 20)

I interpret that she was nervous, because she probably felt the obligation to care for the plants stronger, since she was responsible for someone else's plants and did not want to fail caring for them. Interviewee 5 described how he had learnt to give very specific care instructions, because he had noticed the difference between how he and some of his friends observed plants and interpret their needs.

I(5): Nowadays I rather explain very carefully what one is supposed to do, because many of my plants have died. My former roommates killed very large and old plants by drowning them in water. – – 10 years ago. Back then all the large and fine 20-year-old Jade plants (Crassula ovata) and other plants I had received from my father were... All of them died. Yet I could not blame my friend, because they had not done it on purpose. They for sure watered the plants efficiently.
R: They tried to care them well.
I(5): Exactly. (Extract 21)

This shows how unfamiliarity could produce challenge for plant sitters, houseplants and the owners of the houseplants. Houseplants had adjusted to a certain kind of care by their human carer and indoor environment, and then they were suddenly cared for by a new human carer, that is the plant sitter, possibly in a different indoor environment. This forces the plant to try to adapt into the new care it receives. The plant sitter likely has a different rhythm of care and practices and is not familiar with the needs of the plant and perhaps does not know how to interpret the signals of the plant, such as, if the soil is still moist the plant does not need more water. A situation like this can make both the plant sitter and the owner of the plants worry about the wellbeing of the plants. Hence interviewee 5 aimed to give very specific care instructions, so that a plant sitter would know how to care for each plant and the plants would not have to endure alterations in their relations of care.

In conclusion, houseplants and caring for houseplants are intertwined with human relationships and community in many different ways that are sometimes favourable for houseplants and sometimes not. Houseplants were gifted and exchanged which enabled them to spread and continue to live, hence

they could sometimes live for decades. Memories of important human relationships and events that were attached on some houseplants, as well as long-life of a plant, could make the plants more special for their human carers. Friends and family could also help to care for houseplants, but sometimes houseplants could, at worst, end up dead due to their help.

5.3 Ethical negotiations of good care

Through the interview data the interviewees focus on trying to provide right kind of care for their plants and keeping them alive. Therefore, as Puig de la Bellacasa (2017, 4; 70) argues, there is an ethical dimension attached to care and it includes the endeavour to do good care. Puig de la Bellacasa (2017, 4; 70; 151–155) understands good care as supporting sustainable and flourishing relations between humans and nonhumans, and not only survivalist or instrumental relations. Hence, in this subchapter I consider the ethical relations that are entwined in the care that the interviewees provided to their houseplants.

As mentioned in the previous subchapter, interviewees 5 and 6 had saved poorly cared houseplants from their friends which can be interpret as an ethical action of care aiming for sustainability and flourishing relations. When I asked did interviewee 6 pay attention to other's houseplants she replied:

> *I(6): Yes when I visit someone I always look what kind of houseplants they have and then I may notice like "hey why have you not taken care of this one?" (Extract 22)*

Likewise, interviewee 4's mother observed her plants and pushed her to take better care of them. Hence other humans can encourage one to take better care of their plants. In addition, houseplants themselves can encourage for better caring, because they look better when they receive right kind of care.

By examining the interview data, I noticed that the interviewees seemed to consider letting houseplants die or discarding living houseplants as undesirable. Some of the interviewees described how some of their plants did not appeal to them very much, but they still wanted to keep them. For example, interviewee 1 looked at her Schefflera arboricola and reflected:

> *I(1): Then there is the Dwarf umbrella tree (Schefflera arboricola) which I bought from a flea market. Well it is quite nice, but half of its stalk does not have leaves which*

makes it look a bit strange, hence I do not like it very much, but I want to keep it anyway. (Extract 23)

Interviewees wanting to keep plants like this could be similar to how some of them said they did not want to discard their plants. For example, when I asked whether interviewee 6 liked some of her plants more than the others she replied quickly:

I(6): Oh no, I like all of them. I try to keep all of them alive until the last drop and then it is such a shame to discard them. I am somehow like that with all of them. I almost love them like [my] children. (Extract 24)

Similarly, interviewee 4 had considered adopting her Stephanotis floribunda out. At the moment of the interview the plant was not doing well and interviewee 4 pondered whether it was going to die. I asked would it be a pity if the plant died in which she replied:

I(4): If it is still going to bloom, it would be quite a pity, but if it is not going to bloom... I mean it was so annoying when it made those long stems and I had to turn them all the time to one direction or the other, so if it is not going bloom then... I do not know. I had actually thought that maybe I could adopt it out, but then it bloomed and I did not want to do that anymore. Of course I do not wish for it to die. (Extract 25)

Therefore, the actions of the plant could affectively impact on the carer and make them want to continue to care for the plant or stop caring for it. Still interviewee 4 did not want to discard her plant, but rather ensure the continuation of its life by adopting it out. The matter of interviewees finding discarding their plants undesirable can be understood through Puig de la Bellacasa's (2017, 155) concept of obligation. The interviewees were obliged to care for their houseplants in the indoor environment, because without human care the houseplants would die and then the indoor environment would not be as pleasant for humans anymore. The obligation to care for houseplants and offering them good care is culturally acknowledged, because providing right kind of care is present in plant care guides. Houseplants are also associated with a cultural assumption and meaning of being long-lasting, hence discarding them may be considered as extravagant action and bad care. In addition, it can be considered wrong to let houseplants suffer and die, because after all, they are living beings. Therefore, following Puig de la Bellacasa's (2017, 162–163) interpretation of the intertwinedness of the three dimensions of care, I consider that the interviewees responded to the obligation to care and

the expectation of good care with affective care. The interviewees possibly felt that they were responsible for the wellbeing of their plants and obliged to care for them, which in turn made them want to keep on caring for their plants. Furthermore, perhaps not trying to care for their plants could make the interviewees feel like they had failed as carers. They could also be affectively attached to their plants and hence did not want to cut their relations with them. This explains how the obligation to care and affects could make the interviewees want to avoid discarding their houseplants and letting them die. Next I examine ethical negotiations of good care in indoor environments and some occasions in which houseplants, or parts of them, could be discarded.

Picture 9: Sansevierias and their offsets.

Houseplants need more space as they grow, but there is only as much space available as there is adequate indoor space that their human carer is willing to give them. Interviewee 3 considered dividing her Calathea and gifting part of it to someone, because the plant was quite large and she wanted to keep it in the same pot. Interviewee 2 had a couple of plants that were in small pots and had many offsets (Picture 9). She reasoned she should repot them in the spring. Therefore, one could divide and repot their plant, when the plant grew too big or had many offsets, which supported the wellbeing of the plant. Interviewees also pruned and cut their plants or took cuttings from them to make the plants smaller, possibly better looking and younger. Some plants required this kind of care to remain good looking. Plant propagation also offered a way to try again with the same plant if the plant looked like it was about to die, hence it partially assured one would not lose the plant and also secured the continuation of the plant's life, even if parts of it were discarded.

However, at times the interviewees did not want to, or dare to, discard the cut parts of their plants. For example, interviewee 1 had tried to control the space and the aesthetics of the space by cutting her rapidly growing Dieffenbachia seguine. She explained how she had put the cut top of the plant into a water glass to root and continued:

> *I(1): I thought I would replace the original plant with the new one, because it would be shorter, but in the end I did not dare to discard the original stem. Instead I planted the new plant into the same pot with the original one, in case one of them would die, but I never removed either of them. Hence both of them are in the same pot at the moment, the new one and the original one, and it has even started to grow a third stem from the soil. I think it is actually quite nice, because the plant looks rather good now. (Extract 26)*

Interviewee 1's affective attachment which perhaps could be categorised as a concern of losing the whole plant, combined with the affective obligation to care for the healthy plant and not discard it, made her keep both of the stems. After this the plant decided to grow a new, third, stem and the interviewee accepted it, because it was aesthetically pleasant. When I asked did interviewee 5 occasionally cut his houseplants he replied:

> *I(5): Yes I cut them, when I take cuttings. At times my scissors just swish around. When I see that the growth of some plant starts to get too dense, I cut about twenty stems and make a new plant out of them, and I put the new plant somewhere and it is like an endless cycle. I have very many Wandering Jews (Tradescantia). They are easy to propagate, they look nice and they are so very easy to care. (Extract 27)*

Interviewee 5's reply shows how plants persistently strive to grow and how propagating them is an endless task in the suitable circumstances. Yet, eventually practices like this, which avoided discarding parts of the plants, could lead to a lack of space, because the growing number of plants required more and more space. For example, interviewee 1 told that she had received cuttings from her friend and planted all of them into a same pot, because she did not quite have space to grow them in their own pots. This guides again to Puig de la Bellacasa's (2017, 78) point of how everything can not be cared for and how prioritising cuts are part of care.

Picture 10: Bougainvillea in the middle of the picture.

Cutting the plants could also be challenging, because some plants endured cutting better than the others. For example, sometimes the interviewees had a vision of how they wanted their houseplant to grow and they tried to cut the plant into that aesthetic shape. Interviewee 1 used to cut her Bougainvillea (Picture 10) into the shape of a tree, but at the moment of the interview she was trying another method, because she was afraid the plant would not endure cutting anymore.

> *I(1): Before I always cut it, so that it would stay in the shape of a tree, but now I have an experiment going on in which I let it grow freely and only entwine its stems around each other and see what will happen. This is because in nature it apparently grows as a creeping plant on large areas and hence I am afraid it soon will not have many leaves if I cut it into the same shape and size all the time. These stems are already so stiff that I decided to go for this experiment. Now it does not look as nice as it used to, but this is kind of a test. (Extract 28)*

Interviewee 1 had tried to control the space and the aesthetics of the space by cutting the Bougainvillea, but then got worried about the wellbeing of the plant and started to collaborate with its growth style, as she had done with Dieffenbachia seguine (Extract 26) as well. Furthermore, the Extract 28 shows the intertwinedness of knowledge and doing care and how they are part of the effort of experimenting what is good and sustainable care for the plant.

However, whole houseplants could be discarded if there were houseplant pests on them. Interviewee 2 discarded her pest infested houseplants for the protection of her other plants. Similarly interviewee 1 described:

> *I(1): Then I had one that I had grown from a seed, which name I do not remember now, but it was infested by spider mites and there was even web on it, hence I discarded it quickly. It was overall in a bad shape, so I was not irritated about losing it. I was mainly irritated about the fact that the catalogue acknowledged it as "one of the most beautiful houseplants" and it just looked hideous. Hence I did not mind discarding it. (Extract 29)*

Interviewee 1 discarded the plant quickly to protect her other houseplants, but she also justified her decision with the overall poor condition of the plant and its unpleasing appearance.

Houseplant pests are deemed as undesirable beings, because they harm houseplants. They can create cuts and reorder humans and houseplants relations. Interviewees 1 and 5 had pests on some of their houseplants at the moment of the interview and both of them had ordered a package of predatory insects to get rid of the pests. Predatory insects, for example predatory mites, prey on the pest insects and after that they die due to the lack of food or inability to reproduce. Both interviewees described how important the predatory insects were in caring for their houseplants:

> *I(1): I think it is a very important matter, because previously it has been instructed that if there are pests one must spray them with some generic detergent or something like that. Therefore hobbyists have had quite weak resources for pest control. I regard predatory insects as a very efficient measure to control pests. (Extract 30)*

> *I(5): So this is biological, natural warfare against pest insects. – – It is very nice to try if I can repel them now. Some poisons, I mean "poisons", I do not really use any poisons [only] pine soft soap and things like that, but they do not [work]. Aphids are so persistent. They have eggs everywhere. I must use more powerful weapons now. This cost 50 euros. They will send 500 of both species, hence if I need this once in a year, I can afford this. (Extract 31)*

Interviewees 1 and 5 were willing to pay for the protection of their houseplants which shows their commitment to care for them and keep them alive. Furthermore, it is interesting that certain predatory insect species can become desirable and are allowed to enter the house (cf. Alaimo 2016, 19–22), because they help to protect houseplants. Yet they are only allowed for a certain period of time. In a way using predatory insects for pest control is sustainable and supports flourishing relations between companion species, yet the control of predatory insects' lives in the indoor environment makes using them also instrumental. Furthermore, caring for the houseplants, but not caring for the predatory insects reveals the ambivalent terrains of care.

The ethical dimension of care could conflict with the experimental side of learning to care for houseplants. Interviewee 2 presented her 35-year-old plant which she had received as a cutting from her neighbour. The plant seemed to belong to the genus of Rhipsalis and she described it as follows:

> *I(2): There is scarcely soil here. This has been in this same pot for the whole time. Children dropped it many times. Its soil probably disappeared when they dropped it as the ran to the window to look at something, or something else similar. Then I always just put it back to its pot, but still it has survived and it always grows new stems too. It is even facing to the North. It does not receive much light either. I do not know what plant it is, but I will see how long it will survive. Sometimes it detaches dry stuff like this, but it is like this. It is perhaps in a way my experiment at the moment. I will see how long [it survives], as long as I live, in this same pot. I just observed one day, because there really is not, there is probably only the lump of the roots and the soil that is attached to it here and barely anything else. (Extract 32)*

Interviewee 2's description of her experiment conflicted with the idea of providing right kind of care for the houseplants and supporting flourishing relations. She also acknowledged this, yet she did not try to improve the care she provided. Perhaps she did not want to significantly commit to care for the plant and was experimenting how little care the plant needed, because she merely seemed to think it was strange that the plant kept on living. Perhaps she interpreted that the plant might not need more care, because it was alive and growing, and indeed, the plant did not seem to require much to live. Perhaps she did not need the plant to thrive more, but in general plants strive to grow and it might need better circumstances for that. Altogether, the interviewee's experiment and the needs of the plant seemed to be in some sort of a conflict and the interviewee 2 was supporting mainly survivalist and instrumental relations.

Finally, placing the houseplants in an appropriate place was also entwined with the ethical dimension of care. Interviewee 4 described how her large Chlorophytum comosum had been in a hanging planter before, but now she had placed it on a small table in front of the window (Picture 11).

> *I(4): It used to bloom more, hence I think that it does not really like to be in that place where it is now, but I have still planned to keep it there. It used to be in a hanging planter in front of my window, but I do not want to have it there, because it is so huge and bushy and it is harder to move the curtains when it is in the way. Hence it just will not get back there. I think it does survive in its current place, but perhaps not as well, because it has bloomed less.*
> *R: Perhaps it received more light in the hanging planter?*
> *I(4): Yes it probably did, though I do not think that its current place is dark either, but of course it receives more light when it is right in the middle of the window. (Extract 33)*

Picture 11: Chlorophytum comosum and its new place.

From the Picture 11 one can see that the plant indeed receives a little bit less light in its new place. Therefore, the plant's requirement for light and interviewee's need for convenience, better view and having more daylight in the room were at conflict. Interviewee 4 also had a couple of other plants, Dracaena marginata and Zamioculcas zamiifolia, which her mother had suggested to move closer to the window. She had considered moving them, but did not, because the plants did not seem to suffer

at their current places and the room looked more pleasant with its current arrangement. Yet, it sounded like she was a bit worried and frustrated about all these negotiations. Perhaps she felt the burden of obligation to provide her plants good care , but resisted it in favour of a more pleasant interior design.

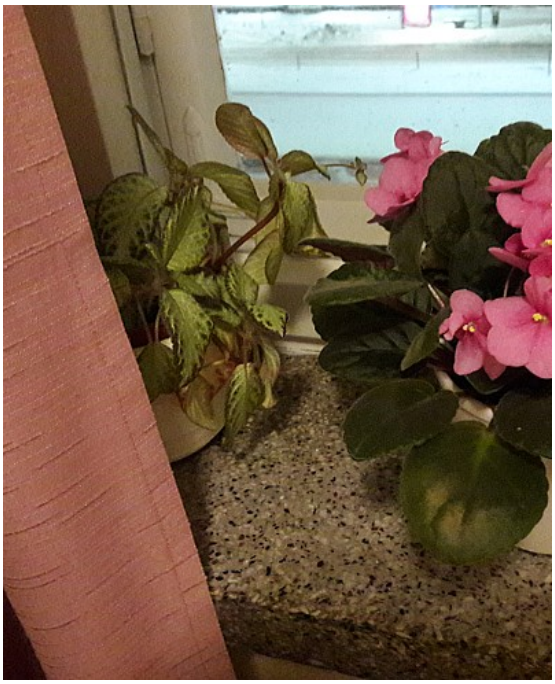
To conclude, the interviewees were obliged to care for their houseplants and often they responded to this obligation with affective care which made them try to provide good care for their plants. In addition, the cultural understanding of houseplants and how they should be cared for encouraged to practice good care, as well as did the houseplants themselves, because supporting sustainable and flourishing relations made them healthy and good looking for a long time. Sometimes the houseplants had to be divided, pruned or cut, because the amount of adequate space in indoor environments is limited and the plants are cared for in relation to this space. This shows how killing is part of care, because everything can not be cared for and the circumstances impact on doing care (Puig de la Bellacasa 2017, 164). Occasionally, perhaps because of feeling an obligation to care and provide good care, the interviewees aimed to ensure more space or new human carer for their plants, so that they could avoid discarding and killing their plants. Yet one could also personally decide not to care for their houseplants for one reason or another, for example pest insects could forward this kind of decision. One could also provide their houseplants mainly survivalist and instrumental care which Puig de la Bellacasa (2017, 151–155) did not regard as good care. Predatory insects that were obliged to consume pest insects in indoor environments also seemed to receive mainly instrumental care from humans, yet they enabled sustainable and flourishing relations to houseplants and humans.

5.4 Caring for houseplants with joy and frustration

Houseplants and caring for them evoked many different emotions and feelings in the interviewees. Sometimes I could also trace affects that were present, because they made the interviewees act and could impact on how they cared for their houseplants, such as the affective care and feeling of obligation in the previous subchapter. Hence, in this subchapter I examine the affective dimension of care and how it was were present in the relations of caring for houseplants.

The appearance and characteristics of houseplants, the human relationships that were attached to the plants and the memories of how the plants were received, often evoked attachment in the interviewees. Interviewee 4 described her favourite plant, Episcia cupreata (Picture 12) which had been her roommate’s plant and reminded her of their commune, in the following way:

I(4): This looks, well that leaf is a bit limp, but this looks quite healthy. And this is like, its leaves are slightly fuzzy. Well of course African violet (Saintpaulia ionantha) has that too, but this one has beautiful colours. I like the shape of these leaves and I think this can grow as a creeper which can of course be troublesome, but for the time being it has stayed in its pot and it seems to have thrived rather well. I was afraid this could be difficult, but this is lovely. (Extract 34)



Picture 12: The Episcia cupreata next to a blooming Saintpaulia ionantha.

Interviewee 4 liked the Episcia cupreata, because of the memories it carried, but also because its leaves had a fuzzy texture, beautiful colour and pleasant shape, and the plant was easy to care and looked rather healthy. Many of the interviewees listed different characteristics of plants like this and described how they appealed to them. It made me think how Pollan (2002) has illustrated the reciprocal relationship of humans and plants and how plants in a way lure humans to be interested in them. For example, the form of a plant and the shape of its leaves and flowers, texture, colour, fragrance and size could be seen as attractive and invite humans to look, observe and marvel these characteristics. Interviewee 3 dreamed of having several different kinds of houseplants, for example she wanted to have Oxalis triangularis because of its beautiful purple coloured leaves. Dreaming of a certain kind of houseplant perhaps implies that the plant is so fascinating one wants to live with it. Yet, the interviewees had different preferences and not all the houseplants appealed to them, some plants even had both pleasant and unpleasant characteristics. Interviewee 1 presented her Streptocarpuses as follows:

I(1): I have one with blue flowers and another one with white flowers. Cape primrose (Streptocarpus) is a traditional houseplant, which I have not had before. They are quite new to me, but I do not like at all the way they grow. They make very long, like a couple of long sparse leaves, which I find aesthetically unpleasant. Yet they make very beautiful flowers and they bloom very diligently. Hence I keep them mainly because of those flowers. (Extract 35)

Therefore, it seems that the interviewees preferred to care for plants that at least somehow pleased them and made their home more pleasant.

The affective dimension of care was often present in the interviewee's concrete practices of doing care. The interviewees were pleased when the care they provided kept their plants healthy and good looking. They also enjoyed following how their plants grew, made new leaves and bloomed, and considered it was interesting and exciting, sometimes also surprising. For example, interviewee 5 explained:

I(5): Especially this Swiss cheese plant (Monstera deliciosa) [is interesting], because it makes so huge leaves now. They are, even though it is one-and-a-half-year-old it has done five or six new leaves and these newest leaves are about 40 centimetres. It is always interesting to see how it starts to make a new leaf and unfurls it, because it makes it in a couple of days, so there are major changes there daily. It is interesting. (Extract 36)

He also mentioned:

I(5): [S]ome of the poorly treated houseplants which I have saved may have become so dear to me that I do not give them back. (Extract 37)

Therefore, as human carers care for their plants and observe them, they learn to know the plants better and can grow fond of them. Interviewee 6 described the excitement that houseplants, and other plants, made her feel and also the feelings she had when there were no plants around her:

I(6): Even in the morning, outside, when I am walking my dog I am carried away with observing some plants and then I suddenly remember I should be making porridge. I always forget when I get excited. I do not know, I think it somehow softens up. I like it that there is green around and it feels bleak if there are no flowers or any houseplants anywhere. It feels terribly bleak and cold. (Extract 38)

Her feeling of bleakness is easy to relate and this feeling perhaps describes the intertwined companion species history of humans and plants and how humans are used to having plants around (cf. Haraway 2003; 2008). Perhaps this kind of affective response is also part of making some humans want to care for plants and bring houseplants into their homes.

Nevertheless, caring for houseplants was sometimes difficult and made the interviewees worry. All of them had faced challenges and the different challenges evoked different kinds of affective responses in them. Interviewee 5 told how he had managed to save his friend's unhealthy Clerodendrum thomsoniae from one miserable stem that had one leaf and small root. Now the plant was in his bathroom and around three meters long. However, the plant was difficult to care and interviewee 5 had experienced diverse feelings while caring for his Clerodendrum thomsoniae.

I(5): It is a hapless climber, because it is such a difficult plant. You can not keep it wet all the time, but when it begins to dry you have to water it, and if you let it dry too much the leaves will forever remain dry looking. They have all looked like that when I have been travelling for, for example, three days. I have not told anyone, I have forgotten to tell anyone about the plants, hence I face this awful view and I am like oh no. I have had problems like this with Bleeding glory-bower (Clerodendrum thomsoniae) a lot. They have dropped every leaf and I am like this is going nowhere, until unexpectedly a new sprout springs out of the soil. (Extract 39)

Emotionally his description was perhaps ranging from shock, grief and despair to hope, joy and success. Yet he did not name any of these emotions, which made me think that perhaps there are more than emotions present. I interpret that he was affectively caring for the plant, which as mentioned in the previous subchapter, means that he was affectively committed to the obligation of care. Interviewee 1 explained that she had nicknamed challenging plant species.

I(1): But then there are certain plant species, which I name "unforgiving", because if one forgets to water a plant like this and the plant droops it will never recover from it. I have had plants like these, but when they die I usually will not get a new similar one, because I do not like plants like that. I think they are irritating. (Extract 40)

Therefore interviewee 1 preferred more enduring houseplants, as did many other interviewees. They wanted to minimise the possible challenges they could face and find plants that collaborated with their rhythm of care and remained good looking. I consider they also wanted to avoid the feeling of failure for losing a plant they had cared for.

Houseplants can grow askew, because they usually stretch their leaves and growth towards the light that often comes mainly from the windows. Hence some of the interviewees occasionally turned their plants, so that they would grow even. The interviewees negotiated with the plants as they tried to guide the plants' growth to be pleasant to the eye. Yet guiding a houseplant's growth and negotiating about the space could be difficult. Interviewee 4 had a climber, Stephanotis floribunda, which had frustrated her. I asked why it frustrated her and did it take too much space, in which interviewee 4 replied:

I(4): It is somehow so uncontrollable when it makes that long [sprout] and grows very much. It seems like it grows to a slightly different direction every day. Sometimes the sprouts are in the way when I try to, for example, open the ventilation window. I do not understand this plant. I do not know what it wants to do with its sprouts. Is it just going to continue growing them? It would be really insane if it just, because they were about one meter long. It can not just grow sprouts like that, and then also what was its aim, I mean, does it just want to keep on growing them? Well then it made, there was one of its sprouts and it made flowers to the tip of it. It is possible that the sprouts are its stems for flowers and it might not continue growing them forever. I am still not quite sure about this, but maybe next time I will not be as panicky about them, because I can think that perhaps at some point it will stop growing that sprout and make the flower to the tip of it and that is it. It is probably more that I do not understand what the plant does and what it wants to do and plans to do, and also partly, as you asked does it take too much space, yes it does and I do not know how long it wants to use that space. (Extract 41)

Interviewee 4's explanation shows that there were conflicts because of her hardships to understand the rapid growth of Stephanotis floribunda, and because the plant challenged the interviewee's control of her home environment. The plant was requiring more space and the interviewee 4 did not know how much space it wanted. At the time of the interview, she had let the climber have the space and was looking forward to its next flowers, even if she had considered adopting it out. Therefore the plant had succeeded in its negotiation for more space. Interviewee 4 had also Pilea peperomioides which she had considered lovely as she had received it. Yet the plant had later started to frustrate her, because it did not grow straight, but bent over and grew askew.

> *I(4): And I did not have stick for it, hence I could not support it. Yet I had seen my friend's Pancake plants (Pilea peperomioides) and knew they could grow askew, hence it has not frustrated me anymore, because I gave up on trying to control its growth. There has been so much space there [on the window sill], that it does not matter. Perhaps the lack of space, I mean I tried to control it because of the lack of space and it was hard. Now I have neutral attitude to the things it does. (Extract 42)*

Interviewee 4's reflections show the negotiation of space between her and her plants, and how the negotiations and her hardship to understand the plants stirred negative affective responses in her. Yet she did not seem to act based on these responses. Other interviewees had felt negative affective responses like this too. For example, interviewee 3 was frustrated if her plants were unhealthy because she did not want them to die, and interviewee 1 was frustrated because there had been dried flower on her Haemanthus as she had bought it and there had also been dried flower on it when someone else had cared for it for some time, and yet the Haemanthus had never bloomed while she cared for it. Hence, in general, negative affective responses seemed to derive from uncertainty, because one felt the obligation to care for a plant and still one often did not know what they had done wrong, why the plant was acting in a particular way and not as its human carer wished for it to act.

Furthermore, the messiness of changing the potting soil and repotting houseplants evoked negative affective responses in some of the interviewees. For example, interviewee 2 described changing the potting soil in the following way:

> *I(2): It is somehow so messy work. Sometimes I do not do it in spring but I do it in summer when I can go outside with the houseplants and change the potting soil there. – – Then with big plants, especially those that I have upstairs which would need*

slightly larger pots, it is hard to change their potting soil indoors. You have to spread very many newspapers and everything and still there is soil all around the place. (Extract 43)

The feelings of untidiness and inconvenience could be the reasons why interviewee 2 did not like repotting her plants. She wanted to keep the indoor environment clean and hence preferred repotting the plants outside, as did some of the other interviewees as well. Interviewee 2 and 4's negative affective responses to uncertainty and messiness (see Extracts 41, 42 and 43) could indicate that they did not want to lose control.

In the end, interviewees seemed to have positive and negative affective responses while they cared for their houseplants. The positive responses were about attachment and feeling good for having beautiful or otherwise pleasant and healthy houseplants around, and succeeding in caring for them. These responses seemed to be part of affective care that encouraged to continue care for one's houseplants. The positive affective responses also show how the houseplants care for humans. The negative affective responses were about failing in caring for one's plants, unpleasantness of care tasks and having challenge in interpreting the plants needs or actions which could make the interviewees feel lack of control or the obligation to care as a burden. The feelings of uncontrol and burden could in turn make the interviewees alter the way they cared for their houseplants, such as postpone repotting them, or look for plants that were easier to care. Therefore, negative affective responses seemed to bear possibility to create cuts and reorder the relations of humans and houseplants.

6 Conclusions

This thesis set off to understand the relations of human-houseplant relationships by examining caring for houseplants in indoor environments. Care was approached through Puig de la Bellacasa's (2017) concept of three-dimensional care, and the methodological framework combined it with actor network theory and companion species to answer the research questions: how does doing care produce the relationship between humans and houseplants, and, how do affect and ethics emerge from these relations. Next I summarise the main findings of this research, connect them to previous research and consider the limitations of this thesis and possible areas for further research.

I started the analysis from hands-on caring for the houseplants, because according to Puig de la Bellacasa (2017; 2012, 198) material engagements of caring sustain companion species. The analysis of the interview data showed that hands-on caring for houseplants helped to learn how to care for those particular plants in a particular indoor environment and recognise the needs of the plants and how their environment impacted on them. This kind of particular care is required when one primarily depends on the other to survive (Puig de la Bellacasa 2011, 98). In addition, sometimes failures in caring for houseplants could make visible the networked co-constituting relations between the companion species and how too much or too little care could reorder the relations of humans and houseplants. Yet the cuts and reorders were not only endings to certain relations, but also re-created possibilities for new relations or changes in the relations (Puig de la Bellacasa 2012, 204; 2017, 78–79), such as, when caring for children occupied the time spent caring for houseplants, or when houseplants were cut and propagated.

In addition to being living beings houseplants are also perceived as decorations, hence the interviewees of this research balanced between caring for houseplants and creating a pleasant interior design. For that reason, usually easy to care and good-looking plants were preferred. Yet it depends on the human carer and their rhythm of care what they perceive as easy to care and good looking. Furthermore, houseplants and their ability to adapt and collaborate with each human carer's rhythm of care and the indoor environment of the home, was part of producing the relationship, and emphasises the agency of plants. Decorating with houseplants and wanting to have houseplants in one's home also represent the long companion species relationship of humans and plants, which indoor environments create challenge. Sometimes human carer's collaboration with their houseplant together with supporting the needs of the plant reflected Puig de la Bellacasa's (2011, 98) description of how caring does not mean being in charge, but knowing and being curious about the needs of the

other. This kind of caring for the other also changes the carer and is part of co-creation, or *becoming with*, of both the carer and cared for (Puig de la Bellacasa 2011, 98; 2017, 219; Haraway 2003). The becoming with can be detected, for example, in how the houseplants adapt to the care they are provided and how human carers learn to notice and interpret certain changes in the plants as signs, and a request for care.

Caring for houseplants also intertwined with human relationships and community in different ways. Memories of important human relationships and events that were attached on a houseplant could make the plant more special for its human carer. Houseplants that had lived for a long time could be appreciated for their long age and the time that had been spent on caring for them. Giving and receiving houseplants seemed to be a way to strengthen human relationships and simultaneously it enabled houseplants to grow and spread into new environments. Friends and family's support on caring for houseplants could make caring for them easier or harder depending on how the friends and family treated houseplants. In addition, friends, family and community could encourage to take better care of houseplants.

Doing care involved ethical negotiations of good care and different feelings, emotions and affects. Usually the interviewees seemed to understand the death of their plants and discarding living plants as bad care, and good care as keeping the houseplants alive and providing right kind of care for them which resonates with Puig de la Bellacasa (2017, 4; 70; 151–155) interpretation of good care as supporting sustainable and flourishing relations. Furthermore, following Puig de la Bellacasa's (2017, 155) concept of obligation, the interviewees were obliged to care for their houseplants in the indoor environments of their homes, because human care sustains houseplants and an indoor environment without houseplants would not be as pleasant for humans which could impact their wellbeing. This means that by caring for the plants the interviewees also cared for themselves and the relations they were part of.

The appearance and characteristics of houseplants evoked different affective responses depending on each interviewee's preferences. Interviewees seemed to pursue having houseplants which they liked and which made their home pleasant. Sometimes they also received less pleasant plants as gifts or found out that their rhythm of care or home environment did not meet the needs of a plant which often made the plant frail and unaesthetic. Yet, sometimes the plants that were not as pleasant as the others, were still allowed to stay. The interviewees kept these plants, because the obligation to care,

human relationships and the expectation of providing good care for one's houseplants could make them feel responsible of the plants. Hence they were affectively engaged to care for the plants.

The attachment to a plant does not necessarily emerge immediately, but through caring for the plant. Yet having difficulties in caring for a plant and understanding the needs of it could create negative affective responses that bore a possibility to create cuts and reorder the relations of humans and houseplants. Human carer's failure to care for a plant could force the plant to neglect the human carer, which often is not a pleasurable feeling, hence the interviewees wanted to have plants that would not neglect them easily. They aimed to maintain their webs of relations. Furthermore, the negative affective responses and failures in caring echo Puig de la Bellacasa's (2017; 2012, 198) notion that "caring or being cared for is not necessarily rewarding and comforting".

I created the methodological approach of this thesis by combining theories and theoretical and methodological approaches of feminist new materialisms and multispecies studies in chapter 3 and subchapter 4.2. Actor network theory, companion species and three-dimensional care enabled being aware of the agency of nonhumans and the networked co-constituting relations between humans and houseplants. Puig de la Bellacasa (2017, 5) emphasises the intertwinedness and possible tensions and contradictions of the three dimensions of care. The intertwinedness of doing care, ethics and affects was clearly present for example in the obligation to care and affective care, and when pursuing good and sustainable care intertwined with hands-on caring for the houseplants as the interviewees experimented what was good care for each plant. Examining Power's (2005, 43) four actions, collaboration, negotiation, competition and challenge, sensitised me to notice the possible tensions of care in the relations of humans and houseplants, and also the agency of nonhumans. For example, there was challenge when interviewees had hardships to interpret the needs of their houseplant and thus provide good care, and there was competition when houseplants needed to compete for care with the other agents of human carer's web of relations, such as their children or freezer. Yet, as Puig de la Bellacasa (2017, 78–79) states, it is not possible to care for everything and cuts are part of the webs of companion species and re-creating the relations. The ambivalence of care is present in creating cuts, because the survival and caring for something can kill something else (Puig de la Bellacasa 2011, 100; 2017), such as was the case in the interview data with the houseplants, pest insects and predatory mites, or when human carers cut their plants and discarded parts of the plants, so that the rest of the plant would be healthier.

Then again, the tensions could unravel with negotiation and collaboration. Negotiation was present in experimenting and understanding how to care and providing the suitable amount of care. Whereas perceiving collaboration of humans and houseplants made possible to notice how these agents adapted to each other and could also support each other, such as was the case when humans gifted houseplants and enabled the plants to spread into new environments. Furthermore, these tensions, negotiations and collaborations express how humans and houseplants become with each other and the other nonhumans of their webs of relations.

I perceive that the limitations of this thesis concern the data. My focus was on the relations of care between humans and houseplants and my analysis based on the interviews which I analysed in relation to the plant care guides and pictures of houseplants. The interview data was rich, but I could have supplemented it with more diverse data, such as proper field notes of my observations of the indoor environments while I was doing the interviews. This would have added depth to the data and supported better triangulation, which means for example collecting and employing multiple research data for the analysis (Patton 2002, 247). The field notes would have supported my analysis regarding the nonhumans and I could have analysed them in relation to the pictures I had taken of the houseplants and the environments they were in. This would have enabled me to bring nonhumans more present in the data and is beneficial to consider in planning further research.

Concerning further research, it would be interesting to examine how humans' beliefs impact on their caring for houseplants and how learning to care changes one's understandings. This could also include touch, since Puig de la Bellacasa (2017, 113–116) explores touch and how it is part of knowing and caring. Moreover, focusing on spatial aspects of indoor space and houseplants could be interesting. Finally, working on this research made me consider how houseplants are cultivated and distributed. I wonder how care is provided in houseplant production, how technology is part of it, where and how are the plants acquired and what are the ethical negotiations in those circumstances. Szczygielska and Cielemęcka (2019, 2–3) consider the roots of the houseplants as they, for example, explain about a smuggling controversy regarding succulents and how it may enfold political entanglements with capitalist markets, in addition, to concern over the loss of biodiversity. They also ask how much do the consumers actually know about their houseplants which I find a very intriguing question, because my thesis shows that humans can partly learn to understand their houseplants through care, but the roots and history of the plants remain largely hidden.

References

Alaimo, Stacy & Hekman, Susan. 2008. "Introduction: Emerging Models of Materiality in Feminist Theory" in Material Feminisms, eds. Stacy Alaimo & Susan Hekman. Bloomington: Indiana University Press.

Alaimo, Stacy. 2016. Exposed: Environmental Politics and Pleasures in Posthuman Times. Minneapolis: University of Minnesota Press.

Anttonen, Anneli; Valokivi, Heli & Zechner, Minna (eds). 2009. Hoiva: tutkimus, politiikka ja arki. Tampere: Vastapaino.

Appel, H. M. & Cocroft R. B. 2014. Plants respond to leaf vibrations caused by insect herbivore chewing. Oecologia 175: 1257–1266.

Arkio, Leena. 1985. Rakkaat vanhat huonekasvit: Ikkunapuutarhan historiaa Suomessa. Keuruu: Otava.

Baron, Katie. 2018. Fetishizing Floriculture: It's Boomtime For Botanicals, Retail's Lucrative New Trend. Forbes, June 12. Accessed from https://www.forbes.com/sites/katiebaron/2018/06/12/fetishizing-floriculture-its-boomtime-for-botanicals-retails-lucrative-new-trend/, 20.11.2018.

Benson, Peter & Fischer, Edward F. 2007. Broccoli and Desire. Antipode, 39 (5): 800– 820.

Betz, Megan & Margulies, Jared. 2019. In their call for papers for The American Association of Geographers (AAG). Accessed from https://biosecproject.org/2018/10/17/news-final-cfp-aag-2019-vegetal-geographies/, 17.10.2019.

Biggs, Caroline. 2018. Plant-Loving Millennials at Home and at Work. The New York Times, March 9. Accessed from https://www.nytimes.com/2018/03/09/realestate/plant-loving-millennials-at-home-and-at-work.html, 24.11.2018.

Birke, Lynda. 2012. Unnamed Others: How Can Thinking about 'Animals' Matter to Feminist Theorizing?. NORA – Nordic Journal of Feminist and Gender Research, 20 (2): 148–57.

Bull, Jacob; Holmberg, Tora & Åsberg, Cecilia. 2018. Animal Places: Lively Cartographies of Human-Animal Relations. Routledge: London.

Cielemęcka, Olga & Szczygielska, Marianna. 2019. Thinking the Feminist Vegetal Turn in the Shadow of Douglas-firs: An Interview with Catriona Sandilands. Catalyst: Feminism, Theory, Technoscience, 5 (2): 1–19.

de Beauvoir, Simone. 1953. The Second Sex. London: Jonathan Cape.

Cameron, Ross W. F. 2014. "Interior Landscapes" in Horticulture: Plants for People and Places: Volume 2: Social Horticulture, eds. Geoffrey R. Dixon & David E. Aldous. Dordrecht: Springer.

Fleming, Jake. 2017. Toward vegetal political ecology: Kyrgyzstan's walnut–fruit forest and the politics of graftability. Geoforum, 76: 26–35.

Freeman, Claire; Dickinson, Katharine; Porter; Stefan & van Heezik, Yolanda. 2012. "My garden is an expression of me": Exploring householders' relationships with their gardens. Journal of Environmental Psychology, 32 (2): 135–143.

Gander, Kashmira. 2017. Millennials are obsessed with houseplants because they can't afford kids. The Independent, September 9. Accessed from https://www.independent.co.uk/life-style/millennials-houseplants-children-kids-money-families-succulent-cactus-bonsai-how-to-dying-a7937021.html, 20.11.2018.

Green, Penelope. 2018. Meet the Plantfluencers. The New York Times. November 8. Accessed from https://www.nytimes.com/2018/11/08/style/08SILL.html, 19.11.2018.

Haraway, Donna. 1998. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. Feminist Studies 14 (3): 575–99.

Haraway, Donna. 2003. Companion Species Manifesto: Dogs, People, and Significant Otherness. Chicago: Prickly Paradigm Press.

Haraway, Donna. 2008. When Species Meet. Minneapolis: University of Minnesota Press.

Head, Lesley & Atchison, Jennifer. 2009. Cultural ecology: Emerging human-plant geographies. Progress in Human Geography, 33 (2): 236–245.

Hitchings, Russell. 2003. People, plants and performance: On actor network theory and the material pleasures of the private garden. Social & Cultural Geography, 4 (1): 99–113.

Hyvärinen, Pieta. 2019. Beekeeping expertise as situated knowing in precarious multispecies livelihoods. Sosiologia, 56 (4).

Jokinen, Eeva; Venäläinen, Juhana & Vähämäki, Jussi. 2015. "Johdatus prekaarien affektien tutkimukseen" in Prekarisaatio ja affekti, eds. Eeva Jokinen & Juhana Venäläinen. Jyväskylä: Nykykulttuurin tutkimuskeskus.

Jones, Owain & Cloke, Paul. 2002. Tree Cultures: The Place of Trees and Trees in Their Place. London: Bloomsbury Academic.

Kirksey, S. Eben & Helmreich, Stefan. 2010. The Emergence of Multispecies Ethnography. Cultural Anthropology, 25 (4): 545–576.

Lehtilä, Sannimari. 2014a. Vanhat huonekasvit ovat taas arvossaan - nyt etsitään vanhinta. Yle Uutiset, 2 April. Accessed from https://yle.fi/uutiset/3-7167797, 14.9.2018.

Lehtilä, Sannimari. 2014b. Huonekasvi on monelle tärkeä – ja melkein kuin perheenjäsen. Yle Uutiset, 8 May. Accessed from https://yle.fi/uutiset/3-7222115, 14.9.2018.

Lewis-Jones, Kay E. 2016. Introduction: People and Plants. Environment and Society: Advances in Research 7, 1–7.

Lohr, Virginia. 2010. What are the benefits of plants indoors and why do we respond so positively to them? Acta Horticulturae, 881 (2): 675–682.

Lykke, Nina. 2010. Feminist Studies: A Guide to Intersectional Theory, Methodology and Writing. New York: Routledge.

Mancuso, Stefano & Viola, Alessandra. 2015. Brilliant Green: The Surprising History and Science of Plant Intelligence. Washington: Island Press.

Nelskylä, Lena. 2017. Suomi sekosi viherkasveista – Etenkin nuoret miehet täyttävät nyt kotinsa palmuilla ja peikonlehdillä. Yle Uutiset, September 17. Accessed from https://yle.fi/uutiset/3-9836469, 14.9.2018.

Patton, Michael. 1990. Qualitative evaluation and research methods. Beverly Hills, California: Sage.

Patton, Michael Quinn. 2002. Qualitative research & evaluation methods, 3rd ed. Thousand Oaks, CA: Sage.

Pietilä, Ilkka. 2010. "Vieraskielisten haastattelujen analyysi ja raportointi", in Haastattelun analyysi, eds. Johanna Ruusuvuori; Pirjo Nikander & Matti Hyvärinen. Tampere: Vastapaino.

Plumwood, Val. 1993. Feminism and the Mastery of Nature. London: Routledge.

Plumwood, Val. 2012. The Eye of the Crocodile. Eds. Lorraine Shannon. Canberra: ANU Press.

Pollan, Michael. 2001. The Botany of Desire: A Plant's-Eye View of the World. New York: Random House.

Pollan, Michael. 2013. The Intelligent Plant: Scientists Debate a New Way of Understanding Flora. The New Yorker, December 23 & 30: 92–105.

Power, Emma R. 2005. Human–nature relations in suburban gardens. The Australian Geographer, 36 (1): 39–53.

Puig de la Bellacasa, María. 2011. Matters of care in technoscience: Assembling neglected things. Social Studies of Science, 41 (1): 85–106.

Puig de la Bellacasa, María. 2012. 'Nothing comes without its world': thinking with care. The Sociological Review, 60 (2): 197–216.

Puig de la Bellacasa, María. 2017. Matters of care: Speculative ethics in more than human worlds. Minneapolis: University of Minnesota Press.

Ramanathan, Lavanya. 2017. Millennials are filling their homes – and the void in their hearts – with houseplants. The Washington Post, September 7. Accessed from https://www.washingtonpost.com/lifestyle/style/young-urbanites-are-filling-their-homes-and-the-void-in-their-hearts-with-houseplants/2017/09/06/ec98993c-89c8-11e7-961d-2f373b3977ee_story.html?noredirect=on&utm_term=.4ace6f4ee78c, 16.9.2018.

Redmalm, David. 2015. Pet Grief: When is Non-Human Life Grievable? The Sociological Review, 63 (1): 19–35.

Ruonakoski, Erika. 2011. Eläimen tuttuus ja vieraus: Fenomenologisen empatiateorian uudelleentulkinta ja sen sovellus vieraslajisia eläimiä koskevaan kokemukseen. Helsinki: Tutkijaliitto.

Ruusuvuori, Johanna & Tiittula, Liisa. 2005. Haastattelu: Tutkimus, tilanteet ja vuorovaikutus. Tampere: Vastapaino.

Ruusuvuori, Johanna & Tiittula, Liisa. 2017. "Tutkimushaastattelu ja vuorovaikutus", in Tutkimushaastattelun käsikirja, eds. Pirjo Nikander; Matti Hyvärinen & Johanna Ruusuvuori. Tampere: Vastapaino.

Ruusuvuori, Johanna; Nikander, Pirjo & Hyvärinen, Matti. 2010. Haastattelun analyysi. Tampere: Vastapaino.

Ryan, John Charles. 2012. Passive Flora? Reconsidering Nature's Agency through Human-Plant Studies (HPS). Societies, 2: 101–121.

Sanders, Clinton R. 1995. Killing with kindness: Veterinary euthanasia and the Social construction of personhood. Sociological Forum, 10 (2): 195–214.

Schuurman, Nora. 2015. Yhteiskuntatieteiden tohtori Nora Schuurman: Eläinkäsitykset länsimaissa. Elä(i)miä yhteiskunnassa -illan puheenvuoro Joensuussa 25.3.2015. Accessed from https://www.youtube.com/watch?v=hMQ8X4W5wYI, 15.2.2019.

Silvasti, Tiina. 2014. "Sisällönanalyysi" in Polkuja yhteiskuntatieteelliseen ympäristötutkimukseen, eds. Ilmo Massa. Gaudeamus: Helsinki, 33–48.

Smith, Carrie. 2016. A Few Notes on Plants Indoors. Published July 2016. Accessed from https://www.cca.qc.ca/en/issues/22/ideas-of-living/39966/a-few-notes-on-plants-indoors, 7.11.2018.

Swanson, Heather Anne. 2019. Key Concepts Entries: Multi-Species Research. The SAGE Encyclopedia of Research Methods.

Szczygielska, Marianna & Cielemęcka, Olga. 2019. Introduction to special section: Plantarium: Human–vegetal ecologies. Catalyst: Feminism, Theory, Technoscience, 5 (2): 1–12.

Telkänranta, Helena. 2015. Millaista on olla eläin? Helsinki: Suomalaisen Kirjallisuuden Seura.

Telkänranta, Helena. 2016. Eläin ja ihminen: Mikä meitä yhdistää? Helsinki: Suomalaisen Kirjallisuuden Seura.

Tiainen, Milla; Kontturi, Katve-Kaisa & Hongisto, Ilona. 2015. Framing, Following, Middling: Towards Methodologies of Relational Materialities. Cultural Studies Review, 21 (2): 14–46.

Tsing, Anna. 2015. The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins. Princeton, NJ: Princeton University Press.

Tuomi, Jouni & Sarajärvi, Anneli. 2018. Laadullinen tutkimus ja sisällönanalyysi. Helsinki: Tammi.

Valkama, Vanessa. 2018. Huonekasveihin hurahtaa yhä useampi – "Sata kasvia on harrastelijalle vielä pikkujuttu". Hämeen Sanomat, September 16. Accessed from https://www.hameensanomat.fi/kanta-hame/huonekasveihin-hurahtaa-yha-useampi-sata-kasvia-on-harrastelijalle-viela-pikkujuttu-235219/, 16.9.2018.

Vehviläinen, Marja. 2014. "Syömisen politiikka arjessa" in Muokattu elämä, eds. Sari Irni; Mianna Meskus & Venla Oikkonen. Tampere: Vastapaino. 305–341.

Vincent, Alice. 2017. Don't mock millennials for hoarding houseplants - it could be the start of a life-long relationship with nature. The Telegraph, 15 September. Accessed from https://www.telegraph.co.uk/gardening/how-to-grow/dont-mock-millennials-hoarding-houseplants-could-start-life/, 25.11.2018.

Wingrove, Elizabeth. 2016. "Materialisms" in The Oxford Handbook of Feminist Theory, eds. Lisa Disch & Mary Hawkesworth. Oxford University Press. 454–471.

Plant care guides

Hietala, Hannele & Puupponen, Esko. 1981. Koti kukkii: iloa huonekasveista ympäri vuoden. Helsinki: Oy Valitut Palat - Reader's Digest Ab.

Lipponen, Vesa & Hilpo, Seppo. 2001. Kodin kukoistavat kasvit. Helsinki: WSOY.

Matthews, Clare. 2012. Houseplants: Plants to add style and glamour to your home. London: New Holland Publishers.

Månsson, Lena. 1999. Ruukkukasvit: yli 500 kaunista kasvia. Helsinki: Otava.

Stenman, Katarina & Wennström, Anders. 2008. Huonekasvit. Helsinki: Gummerus.

Swartström, Carin. 2006. Gummeruksen suuri huonekasvikirja. Helsinki: Gummerus Kustannus Oy.

Appendices

Appendix 1: Haastattelukysymykset (Interview guide, in Finnish)

Taustatiedot

Miksi kiinnostuit huonekasveista? Miten se tapahtui?

Millaisia huonekasveja sinulla on ollut/on nyt?

ovatko jotkut kasveista olleet sinulla pitkään?

Pidätkö joistakin kasveistasi enemmän kuin toisista? Miksi? Miten se näkyy?

miksi ärsyttävä, tylsä, erityinen, ihana?

Miten olet hankkinut kasvisi? (kasvattanut siemenestä tai pistokkaasta, saanut lahjaksi, ostanut...)

onko merkitystä, miten hankkinut?

Onko sinulla lemmikkejä? Jos kyllä, miten tämä vaikuttaa huonekasveihisi?

”Kasvien hoidon opettelu/taitaminen”

Miten opit hoitamaan kasveja?

Luetko kasvinhoito-oppaita ja millaisia oppaita luet? Miten tarkkaavaisesti noudatat niitä?

Miten tulkitset mitä kasvit tarvitsevat? Millaisiin muutoksiin kasveissa kiinnität huomiota?

Miten olet onnistunut tai epäonnistunut siinä?

Jos huomaat, että jollakin kasvilla ei mene hyvin niin mitä teet? /Jos jokin kasvi voi hyvin teetkö jotakin?

Onko kasveissasi ollut kasvituholaisia ja/tai -tauteja? Miten selvisit niistä?

Kasveista huolehtiminen /kasvien kanssa toimiminen

Minne olet sijoittanut kasvit kotonasi? Miksi?

Onko sinulla päivittäisiä toimia kasvien kanssa?

Millaisia viikoittaisia toimia sinulla on?

Millaisiin muutoksiin kasveissa kiinnität huomiota?

Entä vuosittaisia? /Vaikuttavatko vuodenajat siihen, miten hoidat kasveja?

vesi/kastelu, multa, valo, lämpötila, lannoitus, leikkaaminen, uudelleenistutus/ruukunvaihto, millaisia ruukkuja kasveilla on, hoitovälineet...

Tuntuuko sinusta, että sinulla on tarpeeksi aikaa kasvien hoitoon? Miksi?

Jos lähdet matkalle niin miten järjestät kasvien hoidon?

Jutteletko kasveillesi?

Merkitykset/lopetus

Onko suhtautumisesi kasveihin muuttunut sinä aikana, kun olet niistä huolehtinut? Miten se on muuttunut?

Kiinnitätkö huomiota muiden kasveihin tai julkisilla paikoilla oleviin kasveihin? Millä tavalla?

Osaatko tähän loppuun tiivistää tai muutamalla sanalla kuvailla mitä kasvit merkitsevät sinulle?

Haluaisitko sanoa vielä jotain?

Appendix 2: Interview guide

Background information

Why did you get interested in indoor plants? How did it happen?

What kind of plants have you had/have now?

have you had some of the plants for a long time?

Do you like some of your plants more than the others? Why is that? How does it show?

why irritating, boring, special, lovely...

How have you acquired your plants? (grown from a seed or cutting, received as a gift, bought...)

does it matter how acquired?

Do you have pets? If yes, how does this impact on your houseplants?

"Learning to take care of plants"

How did/do you learn to take care of plants?

Do you read plant care guides and what kind of plant care guides do you read? How carefully do you follow them?

How do you interpret what your plants need?

How have you succeeded in it? How have you failed?

If you notice that one of your plants is not doing well, what do you do? And what do you do if some plant is doing well?

Have your plants had insects and/or illnesses on them? How did you cure them?

Taking care of plants/ acting with plants

Where are the plants located? Why?

Do you have daily activities with your plants?

What kind of weekly circle do you have?

What kind of changes in plants do you pay attention to?

What about annual circle? /Do seasons impact on how you take care of your plants?

- water/watering, soil, light, temperature, fertilization, cutting, re-potting, what kind of pots do the plants have, what kind of tools does the interviewee use...

Do you think you have enough time to take care of your plants? Why?

If you go on a trip how do you organise care for your plants?

Do you talk to your plants?

Meanings/ending

Has your attitude towards plants changed during the time you have taken care of plants and how has it changed?

Do you pay attention to other's plants or plants that are in public spaces? How?

Finally, can you summarise or describe in a couple of words what do plants mean to you?

Is there something you would like to add?

Appendix 3: Suostumus haastatteluun (Consent form, in Finnish)

SUOSTUMUS TUTKIMUSHAASTATTELUUN OSALLISTUMISESTA

Haastattelu on osa Tampereen yliopistoon pro gradu -tutkielmana tehtävää tutkimusta, jonka aiheena on ihmisen ja huonekasvin suhde. Tutkimus selvittää millä tavalla ihmisen ja huonekasvin suhde muodostuu, miten ihminen ja huonekasvi (sekä muut elolliset ja elottomat tekijät) vaikuttavat tässä suhteessa toisiinsa, ja mitä tästä ihmisen ja huonekasvin suhteesta seuraa.

Haastattelu kestää noin 1,5 tuntia ja se äänitetään analyysia varten. Mahdolliset kuvat huonekasveista ja haastattelunauhoitteet tuhotaan tutkimuksen valmistuttua. Tutkimusjulkaisuun voidaan sisällyttää suoria lainauksia haastattelusta tai huonekasvien kuvia, mutta haastateltavan nimeä tai muita tunnistetietoja ei tuoda esille julkaisussa.

Tutkimukseen osallistuminen on vapaaehtoista. Osallistujalla on oikeus kieltäytyä tutkimuksesta ja keskeyttää haastattelu milloin tahansa ilman, että siitä aiheutuu hänelle seuraamuksia. Hänellä on myös oikeus saada lisätietoja tutkimuksesta missä tahansa vaiheessa.

Paikka ja päivämäärä: _____

Haastateltavan nimi	Haastattelijan nimi ja yhteystiedot Hilla Rajaveräjä, opiskelija Tampereen yliopisto sähköposti puhelinnumero
Haastateltavan allekirjoitus	Haastattelijan allekirjoitus

Appendix 4: Original extracts in Finnish

Extract 1.

Tutkija: Tulisko siitä ehkä vähän semmosta... tai osaatsä sanoo, että minkä takia susta ois kiva, että niitä ois joka puolella?

Extract 2.

Haastateltava 5: Yleensä mulla on mennyt kaikki kantapään kautta. Pitää mokailla tosi paljon ja sit pystyy masteroimaan.

T: Joo, et se on vähän sillein et ensin epäonnistuu ja sit tietää, että tää ei ainakaan toimi?

H(5): Kyllä ja sen muistaa hyvin aina, kun on epäonnistunu niin sen tietää hyvin aina, että toi ei toimi.

Extract 3.

H(2): Semmoset ei kauheen vaikee hoitoset, että mä semmosia vähän helppoja haen, mutta kyllä sitten on oppinutkin matkan varrella tai en tiedä sopeutuuko ne kasvit sitten enemmänkin siihen hoitoon.

Extract 4.

H(5): Mä oikeestaan katon niitä läpi päivittäin. Aina kun ohi menee niin ne vetää puoleensa ja pitää alkaa tarkisteleen.

Extract 5.

H(3): Esimerkiks, kun tää piilea (Pilea peperomioides) alkoi näyttää huonovointiselta, mä päättelin sen siitä, että siinä lehdet kellastu ja ruskistu ja ne tippu, niin mä sitten itseasiassa irrottelin niitä lehtiä pois ja mä kokeilin siirtää sitä erilaiseen paikkaan. Mä aattelin, että sen pitäis olla lähellä ikkunaa, että se sais mahdollisimman paljon valoo, mutta sitten mä mietin, että jos noista ikkunoista vetää, että paleleeko se. Mun mielestä toi nukkumatti (Maranta leuconeura) paleli, niin mä siirsin sen tonne vähän kauemmas (ikkunoista). Että just tällasta paikan vaihtamista ja niiden huonojen lehtien irrottelua. Joskus myös sitä ravinteen lisäämistä. Se olis varmaan sellanen opin paikka, että tää kastelun määrä. Musta tuntuu, että jotkut varsinkin niistä mehikasveista on saattaneet kuolla liikaan kasteluun. Täytyis oppia se, että vaikka näyttäiskin kuivalta niin se ei välttämättä voi huonosti silti, vaikka se ois kuiva.

Extract 6.

H(6): Jos se [kasvi] on omasta mielestään liian isossa ruukussa, että se ei tykkää siitä, silleinkin on käynyt, niin mä vaihdan sitten pienempään. Kyllä mä oon ystävillä nähny, että niillä on isoja kukkia

ja ne on niin valtavan pienissä ruukuissa, että multa tulee ihan yli sieltä ja... Mä tahdon kyllä aina sillein laittaa vähän liian suuriin ruukkuihin. Sen mä oon huomannu.

Extract 7.

H(2): Ensin mietin, että oonko mä kastellut liikaa vai oonko mä liian vähän kastellut. Se on kai se ensimmäinen, mutta en mä sitten... ehkä vähän paikkaakin voin vaihtaa, että kokeilen menestyiskö se jossain toisessa paikassa paremmin. Sen mä oon huomannut, että joskus jos kovastikin vaihtelee paikkoja niin ei ne siitäkään tykkää, että ehkä sitten se tietty paikka niille kuitenkin on parempi kuin, että ettii niille uusia paikkoja ja sitten ne ei rupee menestyynkään enää. Rupee kellastuun tai jotain muuta vastaavaa.

Extract 8.

H(1): Kaikki on ikkunan edessä, että se määrää mun sisustuksen. Ne ikkunapaikat täytyy kaikki varata kasveille. Mielelläni sijottaisin kasveja muuallekin, mutta mä oon aina ollut sillain epäileväinen siihen, että ne pärjäis sitten varjosemmassa nurkassa vaikka sitä ois kiva kokeilla. Mä tykkäisin, että kasveja olis joka puolella. Toisaalta niitä on helpompi hoitaa, kun ne on kaikki ryhmissä.

Extract 9.

H(6): Mä vaan tykkään, että noi on niinku vähän verhona tossa.

Extract 10.

H(5): Noi köynnöksethän nyt on katossa ja missä millonkin, niin ne saa ihan semmosta hajavaloo ja ne ei tarviikaan, kun ne on aluskasvillisuutta sademetsässä eikä sinne tuu niin paljon valoa. Kosteus on kans mitä ne tarvii ja sen takii mulla on ilmankostuttajia.

Extract 11.

H(5): Sellanen LED-lamppu, joka on kans tosi semmosta valkosta, vaaleinta väriä, niinkun nää kirkaspäivä lamput ja muut, jotka auttaa kaamoksen yli. Se on aika samaa aaltopituutta olevaa, niin se piristää myös mieltä kanssa, niin sen takia kasvit voi hyvin talvellakin täällä.

Extract 12.

T: Niin tossa ei oo mitään kaihtimia tai mitään, että eteen sais?

H(3): Ei tässä asunnossa ei oo ollenkaan ja tää on vuokra-asunto niin ei sillain pystykään saamaan ja sitten taas, kun mä tykkään tästä erkkeristä, niin mä en oo halunnut myöskään laittaa tähän verhoja.

Toisaalta niillä verhoillakin pystyis vähän suojaamaan, mutta sitten se taas piilottaa tän erkkerin kauniin muodon. Täytyy nyt sitten tilanteen mukaan.

Extract 13.
H(5): Ne on ollut siellä nyt yli vuoden ainakin. Niit on siel varmaan yli 40. Ne pitäis käydä hakeen jossain vaiheessa pois. Mä oon sit ollu vaan sillein, että ei pitäkää ne nyt. Mä tuun joskus hakeen jonkun niist pois, et en ota kaikkii takas.

Extract 14.
H(3): Tää on se puolisolta saatu, mutta tää on tosiaan. Tästä mä en niin muuten tykkää, mutta tää on sen takia kiva, että tää on puolisolta saatu.

Extract 15.
H(1): [S]iihen suhtautuu eri tavalla, kun sen tietää, että se on sen kaverin kasvin klooni niin sitten se muistuttaa siitä ystävästä.

Extract 16.
H(4): Se mun opettaja, jolta mä sain ton kasvin on varmaan ollut kuollut jo pitkän aikaa. Eiks oo vähän hassua ajatella, että mulla on sen kukkanen vielä? Mut tavallaanhan se ei oo ihan sama kukka, kun siitä on otettu uutta alkua, mut kai se nyt kuitenkin silti on.

Extract 17.
H(5): Kyl se mun mielestä on kivempi saada semmonen, jolla on historiaa. Esimerkiksi puoliso jossain vaiheessa hommas Facebook-kirppikseltä, kun ihmiset antaa jotain kasveja, niin se kävi hakeen niitä. Jotain just 20 vuotta ollu jollain ja ei enää jaksa pitää ja jotain tällasta. Se on tosi kiva. Mieluummin semmonen kuin, että käy ostaan Plantagenista jonkun 4 euron kasvin.

Extract 18.
H(3): Kyl varmaan, että mitä kauemmin ne on niin sitä enemmän niistä ikään kuin välittää, että kun ne on selvinny näin kauan. Kun jotenkin mulla on silti kasveista yleisesti sellainen ajatus, että ne on tietyllä tapaa kuolevaisempia kuin ihmiset ja eläimet, että ne ei elä niin pitkään. Toisaalta sitten taas jotkut kasvit, niin kuin se mun ystävältä saatu kultaköynnös (Epipremnum aureum), niin on 40 vuotta vanhasta kasvista otettu, niin sitten jotenkin se ehkä lisää sellaista hoitamisen halua, kun ne niinku elää pidempään.

Extract 19.

H(3): Meillähän on semmonen hauska työnjako, että mä hoidan nää sumuttelut ja mullanvaihdot ja tämmöset, mutta puoliso yleensä kastelee meillä kukat.

Extract 20.

H(4): Hakispa kasvinomistaja tän nopsaa takasin. Mä en osaa oikein ehkä hoitaa tätä. Siitä menee tosi nopeeta toi vesi läpi ja mä ennen kastelin sitä vähemmän, mut nyt se juo enemmän.

Extract 21.

H(5): Nykyään mä vaan mieluummin selitän ihmisille tosi tarkkaan mitä tehdä. Kun niitä on tosiaan kuollu. Mun entiset kämppikset on tappanu tosi isoja ja vanhoja kasveja sillä, että ne lillu vaan vedessä. – – 10 vuotta sitten. Sillon oli mun kaikki isält saadut isot hienot parikymmentä vuotta vanhat rahapuut ja tämmöset niin ne oli... Ne kuoli kaikki. Mut enhän mä voinu syyttää sitä kaveria, eihän se sitä tehny tahallaan. Se kyllä kasteli niitä tehokkaasti.

T: Yritti hoitaa kovasti.

H(5): Nimenomaan.

Extract 22.

H(6): Kyllä mä aina katon, kun mä meen kylään, niinku mitä kasveja siellä on ja mitä tai sit huomaa, että ”hei mikset sä oo tätä hoitanu?”

Extract 23.

H(1): Sitten on siroliuska-aralia, jonka oon ostanut kirpparilta. No tää on ihan kiva, mutta se on semmonen, josta on puolet varresta ilman lehtiä, niin se on vähän oudonnäkönen, niin siitä mä en hirveesti tykkää, mutta haluan pitää sen kuitenkin.

Extract 24.

H(6): No en, mä tykkään kaikista. Mä yritän pitää kaikki ne hengissä ja vaikka viimeseen tippaan saakka ja sit on kauhee sääli heittää menemään. Mä oon jotenkin semmonen kaikista. Rakastan kuin [omia] lapsia melkein.

Extract 25.

H(4): Jos se aikoo vielä tehdä niitä kukkia, niin olis vähän harmi, mutta jos se ei aio tehdä niitä kukkia... Siis toi oli kyllä niin rasittava, kun se teki niitä pitkiä varsia ja niit sai koko ajan kääntää

johkin suuntaan ja näin, että jos se ei enää niitä kukkia tee niin... En mä tiedä. Mä oon kyl miettiny, että jos mä antaisin sen pois, mut se teki ne kukat nii sit mä en enää halunnu. En mä toki kuolemaa sille toivo.

Extract 26.

H(1): Mä ajattelin, että mä laitan sen sitten sen vanhan tilalle, että se on matalampi, mutta sitten mä en raaskinu kuitenkaan poistaa sitä alkuperäistä vartta, vaan mä laitoin ne samaan aikaan tänne ruukkuun siltä varalta, että jos toinen kuolee, mutta mä en ikinä poistanu toista. Niin ne molemmat on nyt tossa samassa ruukussa se pistokas ja se alkuperänen ja sitten se on alkanu tekeen vielä kolmannenkin tuolta ruukusta, mikä on musta itseasiassa ihan hyvä, että nyt se on aika kivannäköinen.

Extract 27.

H(5): Joo leikkaan, kun mä otan pistokkaita. Aina niinku silloin tällöin sakset viuhuu. Alkaa olee jossain kohtaa liian tuuheeta, niin leikkaan sielt parikyt oksaa pois ja teen niistä uuden kasvin ja laittaa sen jonnekin ja toi on tollanen lopunton sykli. Mul on juoruja (Tradescantia) tosi paljon. Ne on helppoi laittaa, niist tulee kivan näkösii, maailman helpoimpii hoitaa.

Extract 28.

H(1): Aikasemmin mä leikkasin sitä aina, että se pysy siinä puunmallissa, mutta nyt mulla on sellainen kokeilu, että mä oon antanut sen kasvaa vapaasti ja sitten vaan kiedon niitä oksia sinne muiden sekaan sumppuun ja katon, että mitä siitä tulee, kun luonnossa se ilmeisesti kasvaa kuitenkin ihan köynnöksenä isoilla alueilla, niin mä pelkään, että siinä ei oo kohta enää paljon lehtiä, jos mä leikkaan sitä koko ajan samanmalliseks ja samankokoseks, koska nää oksat on niin pitkälle jo puutunu, niin sen takia mä lähdin tollaseen toiseen kokeiluun. Nyt se ei oo niin kivannäköinen kuin mitä se aikasemmin oli, mutta tää on tämmönen testi.

Extract 29.

H(1): Sitten mulla oli yks siemenestä kasvatettu, jonka nimee mä en nyt muista, mutta siihen tuli niitä vihannespunkkeja ja seittiäkin niin mä heitin sen äkkiä meneen. Se oli huonokuntonen, niin se ei jääny mua harmittaan. Mua harmitti lähinnä se, että siinä luettelossa luki ”yksi kauneimpina pidettyjä huonekasveja” ja se oli ihan kamalan näkönen. Niin ei haitannu vaikka piti heittää se pois.

Extract 30.

H(1): Se on musta tosi iso asia, koska aikasemmin on vaan ohjeistettu, että jos on jotain ötököitä niin sitten vaan suihkutellaan jollain tolulla ja muuta. Ne on ollu aika heikkoja ne torjunta keinot harrastajilla. Niin mä pidän tota tosi tehokkaana torjuntatapana.

Extract 31.

H(5): Et biologista tällasta luontasta sodankäyntii tuholaishyönteisii vastaan. – – Tosi kiva kokeilla, että lähteeks ne nyt. Jotkut myrkyt tai siis ”myrkyt”, en mä oikein käytä mitään myrkkyjä [vain] mäntysuopaa ja tämmösii, niin ei ne [auta]. Kirvat on niin sitkeitä. Niil on munii joka paikassa. Pitää ottaa nyt kovemmat aseet käyttöön. Toi makso 50 euroa. Sielt tulee 500 kumpaakin lajii, niin jos sitä nyt tarvii kerran vuodessa niin se ei oo paha.

Extract 32.

H(2): Tällä ei oo juuri multaa. Tää on ollu aina tässä samassa purkissa koko ajan. Tän on lapset pudottanu monta kertaa. Sen multa on varmaan hävinnykin, kun tää on pudonnu tästä, kun ne on juossu ikkunaan kattoon aikoinansa jotain tai muuta vastaavaa. Mä oon sitten aina vaan sullonu sen takasin tohon, mutta siinä se vaan menee ja siihenkin aina uutta tulee. Tää on täällä vielä pohjosen puolella. Tää ei kauheesti saa valookaan. En mä tiedä mikä tää on, mutta mä katon kuinka kauan tää nyt menee. Välillä siitä tulee tätä tämmöstä kuivaa, mutta tää on tämmönen. Tää on ehkä vähän mun tämmönen tutkimus tällä hetkellä. Mä katon, että miten kauan [tämä selviää], yhtä kauan kun minä elän niin tässä potassa. Just sitä kattelin yks päivä, kun tääl ei oo kyllä, se on varmaan vaan se juurimöykky ja mitä sen ympärillä on multaa, niin siinä ei juuri muuta oo.

Extract 33.

H(4): Se kukki enemmän ennen kuin nytten niin musta tuntuu, että se ei oikein tykkää olla tossa missä se nyt on, mutta mä oon silti ajatellut pitää sen siinä. Kun se roikku ennen amppelissa mun ikkunan edessä, mutta mä en haluu sitä takasin amppeliin, kun se on ihan tommonen hillitön puska ja sitten verhoja on vaikeempi siirtää, kun se on tiellä, niin se ei nytten vaan pääse sinne. Kyllä musta tuntuu, että se pärjää tossakin, mutta ehkä vähän huonommin, koska se on kukkinut vähemmän.

R: Ehkä se sai enemmän valoo siinä amppelissa?

H(4): Niin se varmaan sai, vaikka ei toikaan musta pimee kohta oo, mutta tietysti siihen tulee enemmän, kun se on ihan keskellä ikkunaa.

Extract 34.

H(4): Tää näyttää, no toi on vähän löpsö lehti, tää näyttää aika hyvin voivalta. Sit tää on tämmönen tässä on ihan pieni nukka. No tietysti santussakin (Saintpaulia ionantha) on semmonen, mutta tää on kauniin värinen. Mä tykkään tästä lehtien muodosta ja sitten tää kai voi tehdä semmosta pitempääkin köynnöstä alas. Se voi tietysti olla myös hankalaa, mut nyt toistaseks se on pysynyt tässä purkissa ja tää on tuntunu pärjäävän aika hyvin. Mä pelkäsin, että tää vois olla vaikee. Tää on vaan ihana.

Extract 35.

H(1): Mulla on sinikukkanen ja valkokukkanen. Se on sellanen perinnehuonekasvi, jota mulla ei oo aikaisemmin ollut. Ne on aika uusia mulle, mutta mä en yhtään tykkää tosta kasvutavasta. Se tekee sellasia hirveen pitkiä, niinku muutaman harvan pitkulaisen lehden, mikä on musta esteettisesti epämiellyttävä, mutta se on tosi kaunis se kukka ja se kukkii tosi ahkerasti sitten, kun se niitä tekee. Niin lähinnä niiden kukkien takia niitä pidän.

Extract 36.

H(5): Varsinkin toi peikonlehti (Monstera deliciosa) [on mielenkiintoinen], kun se tekee niin isoi lehtii nytten tässä. Ne on, vaiks se on nytten puoltoista vuotta vanha niin, onks se viis vai kuus lehtee tullu, niin nää uusimmat on jotain 40 senttisiä lehtiä. Se on aina mielenkiintosta nähdä, kun se alkaa tekee sitä uutta lehtee ja avaa sen, kun se tekee sen muutamassa päivässä niin siinä on niin isoja muutoksia päivittäin. Se on mielenkiintosta.

Extract 37.

H(5): [J]otkut niinku pelastusprojektit on saattanu tulla niin rakkaiks, että mä en enää anna niitä takasin.

Extract 38.

H(6): Pihallakin jää aamulla sinne koiran ulkoilureissulla kattelemaan jotain, ja sitten nii munhan pitäis puuro keittää. Unohtuu aina sitten, kun innostuu. Emmä tiedä se jotenkin niinku pehmentää. Mä tykkään, että on vihreetä ympärillä ja semmonen tuntuu kalseelta semmonen, että jos missään ei oo kukkia tai mitään viherkasveja niin must on hirveen kalsee ja kylmä.

Extract 39.

H(5): Se on kyl kovanonnen köynnös, kun se on niin vaikee kasvi. Se, kun sitä ei saa pitää koko ajan märkänä, mut sit kun se alkaa kuivahtaa se pitää kastella, mut jos sä annat sen kuivahtaa liikaa niin

ne lehdet jää ikuisesti semmosiks kuivannäkösiks. Ne on kaikki sen näkösii, kun mä oon ollu jossain reissussa vaikka kolme päivää. Mä en oo sanonu kellekään, oon unohtanu sanoo kellekään noista, niin mua odottaa semmonen kauhee näky ja mä oon sillein voi ei. Kohtalonköynnösten (Clerodendrum thomsoniae) kanssa on ollut noita ongelmia tosi paljon. Ne on kaikki tiputtanu ja mä oon sillein tästä ei tuu mitään, kunnes sieltä mullasta ponnahtaakin ylös uus verso.

Extract 40.

H(1): Mutta sitten on sellasia tiettyjä kasvilajeja, joita mä sanon, jotka ei anna anteeksi, eli, jos kerran jää kastelematta ja ne ehtii nuupahtaa niin ne ei ikinä toivu siitä. Mulla on ollut semmosia mutta sitten, kun ne kuolee, mä en osta yleensä uutta samanlaista, koska mä en itte tykkää semmosista kasveista. Musta ne on ärsyttäviä.

Extract 41.

H(4): Se on jotenkin niin hallitsematon, kun se tekee sen pitkän [verson] ja se kasvaa tosi paljon. Tuntuu, että joka päivä se menee vähän eri suuntaan. Joskus ne sen piipat on tiellä, kun yrittää vaikka avaa ikkunaa. Mä en ymmärrä sitä kasvia. Mä en tiedä mihin se pyrkii, että mitä se tekee niillä piipoilla. Jatkaako se vaan niitten tekemistä? Oishan se ihan hullua jos se vaan, kun ne oli jotain varmaan metrisiä, niin eihän se nyt voi vaan tehdä sellasia tosta ja sitten just, että mikä sen tavote oli, että haluuks se vaan jatkaa koko ajan? Sittenhän se teki, sillä oli semmonen piippa ja se teki sinne päähän ne kukat. Se voi olla, että ne on sen kukkavarsia ja se ei niinku jatkaiskaan niitä ikuisuuksiin. Mä en oo vieläkään ihan varma asiasta, mut ehkä mä en ens kerralla oo ihan niin paniikissa niistä, kun mä ajattelen, että ehkä se jossain vaiheessa lopettaa sen piipan tekemisen ja vääntää sen kukan siihen päähän ja se siitä. Tää oli varmaan enemmän, että mä en ymmärrä mitä se tekee, että mihin se pyrkii ja mitä se aikoo ja myös osittain, kun sä kysyit, että valtaako se liikaa tilaa, niin joo ja mä en tiedä miten pitkäks aikaa se haluaa sen tilan.

Extract 42.

H(4): Eikä mulla ollut keppiä sille, niin mä en voinut laittaa. Mä olin kumminkin nähnyt ne kaverin pileat (Pilea peperomioides) ja tiesin, että se voi mennä sinne vinoonkin, niin ei se oo enää mua ärsyttänyt, kun mä luovuin siitä yrityksestä hallita sitä, että minne se kasvaa. Tossa on ollut niin paljon tilaa [ikkunalaudalla], että ei sillä oo väliä. Ehkä se tilan puute, että mä sen takia yritin kontrolloida sitä ja se oli vaikeeta. Nyt mulla on semmonen aika neutraali suhtautuminen noihin sen juttuihin mitä se tekee.

Extract 43.

H(2): Se on jotenkin niin sotkusta puuhaa. Joskus mä teen kyllä niin, että mä en tee sitä keväällä mä vaan teen sen sitten kesällä, kun pääsee tonne pihalle niitten kanssa, niin sitten siellä tulee vaihdettua. – – Sitten kun on tollaset iso kasvit, varsinkin tuolla ylhäällä, jotka nyt kanssa tarvis vähän isomman purkin, niin se on vähän niitten kanssa sisällä hankala touhuta. Täytyy niin kauheesti levittää sanomalehteä ja kaikkee ja silti sitä multaa on joka puolella.